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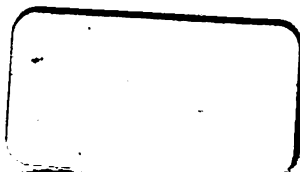
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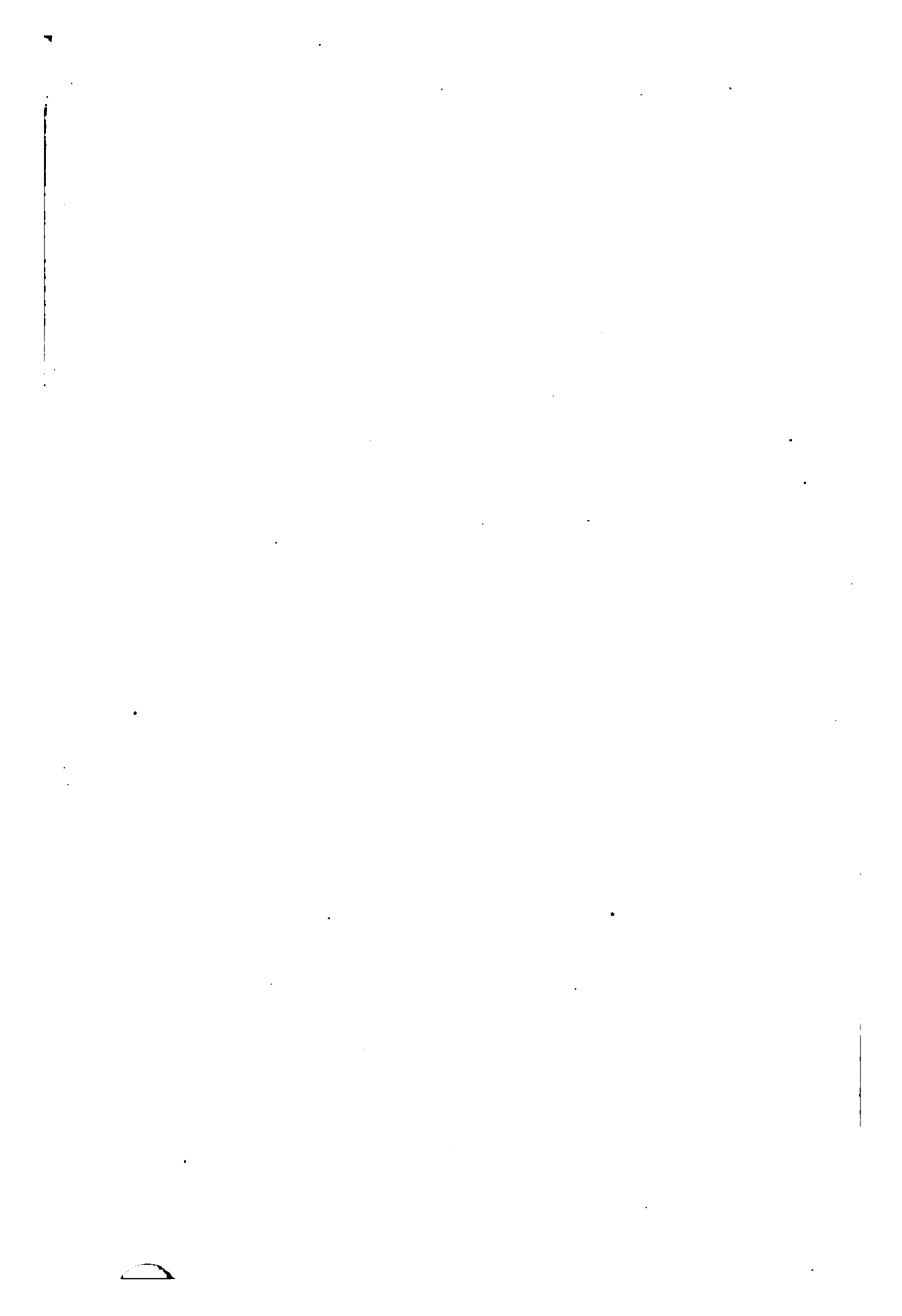
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HENRY BAIRD FAVILL

1860—1916



Henry B. Swell

HENRY BAIRD FAVILL

A.B., M.D., LL.D.

1860—1916

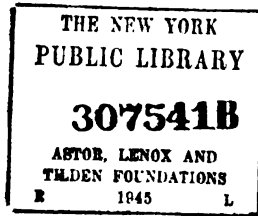
A Memorial Volume **LIFE, TRIBUTES, WRITINGS**

COMPILED BY HIS SON

CHICAGO
Privately Printed

1917

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JOHN FAVILL



THE RAND McNALLY PRESS

FOREWORD

THIS volume has been prepared as a remembrance of my father for those who admired and loved him. It seemed to me that the remarkable number of beautiful tributes which appeared after his death, and certain of the many letters of sympathy which were received by my mother and myself, should be shared by others. The varied interests which he had during his full life led to the writing of many papers and speeches, and these I have now collected, feeling that, while some may be interested in them all, all to whom I give this book will find in some of them thoughts which will bring happy recollection, stimulus, and help. I do not doubt that, could I consult him, he would have me discard many of them. But he will not mind if he knows how their collection has been an inspiration to me. To my secretary, Nancy D. Sibley, who was my father's secretary for twenty years, I now express my deepest gratitude for her never-failing, loyal interest and indispensable aid in the preparation of this book.

JOHN FAVILL.

CHICAGO,

November 9, 1917.

Revised - 24 July, 1918

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FAVILL, HENRY BAIRD (1860—1916)

A BIOGRAPHICAL SKETCH

[Written for Kelley and Burrage's *American Medical Biography*, by DR. E. C. DUDLEY.]

FAVILL, HENRY BAIRD, physician, was born at Madison, Wis., August 14, 1860, son of John and Louise Sophia (Baird) Favill. His first paternal American ancestor was John Favill, who came to this country from England some time before the Revolution, and, after fighting in the Continental Army, settled in the town of Manheim, Herkimer County, N. Y. From him and his wife, Nancy Lewis, the line of descent is traced through their son, John Favill, and his wife, Elizabeth Guile. Their son, John Favill, and his wife, Louise Sophia Baird, were the parents of Henry Baird Favill. His father was a leading physician in Wisconsin, a member of the first state board of health, and president of the Wisconsin State Medical Society in 1873. Henry Baird Favill was a descendant through the maternal line from the Ottawa chief Kewinoquot, "Returning Cloud," and was especially proud of his Indian ancestry. The Indian line is as follows:

1. The Ottawa chief Kewinoquot and wife Mijik.
2. The Princess Migisin, baptized Marie, daughter of Kewinoquot, educated by the missionaries at Mackinac Island, married Jean Baptiste Marcotte.
3. Thérèse Marcotte, daughter of Migisin, married (1) Pierre La Salière, and (2) George Schindler. She was well known as Madame Schindler.
4. Marianne La Salière, daughter of Madame (La Salière) Schindler, married Henry Monroe Fisher. Mrs. Fisher translated numerous religious books, including parts of the Bible, from the French into the Ottawa language. These translations have been extensively used by the

missionaries among the Indians. Mrs. Fisher was the head of a widely recognized school attended by daughters of the most influential white families and by Indian girls as well.

5. Elizabeth Thérèse Fisher, daughter of Marianne La Salière Fisher, married Henry S. Baird of Green Bay, Wis.

6. Louise Sophia Baird, daughter of Elizabeth Thérèse Baird, married Dr. John Favill of Madison, Wis.

7. Dr. Henry Baird Favill was the only son of Louise Favill.

Although, as will be seen from the above, Dr. Favill was only one thirty-second part Indian, his physical appearance would have enabled him to pass as immeasurably more Indian than white.

Dr. Favill was a graduate of the Madison High School, of the University of Wisconsin, A. B., in 1880, and of Rush Medical College, M. D., in 1883. In this latter year he was an intern at Cook County Hospital, Chicago, and then became associated in practice in Madison with his father, who died a few months later. In 1885 he married Miss Susan Cleveland Pratt of Brooklyn, N. Y. For three years he lectured on Medical Jurisprudence in the Law Department of the University. In 1894 he left a large practice in medicine and surgery in Madison, and removed to Chicago to accept simultaneous calls to the Chair of Medicine in the Chicago Policlinic, and to an adjunct Chair of Medicine in Rush Medical College, from which latter he was promoted in 1898 to the Ingals Professorship of Preventive Medicine and Therapeutics, and in 1906 to the Chair of Clinical Medicine.

His practice, now confined to internal medicine, soon became large and influential and his reputation rapidly assumed a national character. At different times he was officially connected with numerous hospitals, among them the Augustana Hospital, the Passavant Memorial Hospital, and St. Luke's Hospital, of which last, at the time of his death, he was president of the Medical Board. One of the

many medical organizations in which he took great interest was the Chicago Tuberculosis Institute of which for many years he was president. Some of the medical organizations of which he was a member are: The Chicago Society of Internal Medicine, Chicago Institute of Medicine, Physicians' Club of Chicago, Illinois and Wisconsin State Medical Societies, and the Chicago Medical Society, of which he was president in 1907-08. He was an influential member of the National Association for the Study and Prevention of Tuberculosis, the National Committee for Mental Hygiene (being elected its first president in 1909), and was a Fellow of the American Medical Association. From the time of its formation in 1910, he was chairman of the Council on Health and Public Instruction of the A. M. A. His club memberships included the University, City, Saddle and Sirloin, and Commercial. He was the only man without commercial connections in Chicago ever elected to the latter organization. His fraternities were Beta Theta Pi and Nu Sigma Nu, and he was elected to the Phi Beta Kappa Society when the University of Wisconsin installed a chapter years after his graduation. He held the rank of First Lieutenant, U. S. A. Medical Reserve Corps, and the degree of LL. D. from Wisconsin.

Although not a voluminous writer, his lectures and contributions to medical literature abounded in originality of thought and expression. One of the more significant of these was "The Public and the Medical Profession, a Square Deal," delivered before the Pennsylvania State Medical Society in 1915.

In 1910 he was president of the Municipal Voters' League, during which period he exhibited sound and unbiassed judgment, strongly and fearlessly opposing those who favored impure politics. He was president of the City Club, 1910-1912, serving as one of its directors from 1905, and at one time as chairman of the Committee on Public Affairs. Independent in politics, he was a leader

in the cause of good government, municipal improvement, and sanitary progress, and was for many years a trustee of the Chicago Bureau of Public Efficiency and a director of the United Charities.

During the last eight years of his life he became intensely interested in cattle breeding and the dairy industry and gave most of his spare time during these years to the building up of a model stock farm, "Milford Meadows," at Lake Mills, Wis. His deep study and application to agricultural and breeding problems led to the writing of many important articles and lectures on these subjects, and to his election as vice-president of the Holstein-Friesian Association of America, and president of the National Dairy Council. It was during a visit to Springfield, Mass., in connection with the latter organization, that he succumbed to a virulent attack of pneumonia, leaving his widow and one son, Dr. John Favill, on February 20, 1916.

No other physician in America was so widely, sympathetically, and intimately related to movements of public welfare, to all of which by temperament he was singularly adjusted. A lover of outdoor life, he frequently indulged in long walks regardless of temperature, rain, or snow, believing in plenty of exercise rather than abundant clothing. Optimistic, just, determined, upright, a vigorous thinker, and an astute reasoner, he had the rare quality of getting at the gist of things, of seeing through non-essential details to the real point at issue, and so his judgment was in constant demand in a wide field of medical, civic, and political problems, the most intricate of which, because of his scientific and dispassionate mind, he was able to solve. Add to these qualities a rare and subtle humor, of which this is an example: When Mrs. Favill was elected a Colonial Dame, some reporters called upon him and facetiously inquired whether he could not qualify for the Society of the Mayflower. "No," he said, "my people were on the reception committee."

At the time of his funeral, Rev. F. W. Gunsaulus, a warm personal friend, said: "The personality of Dr. Favill exalted the work and achievements of the physician as well as the practical reformer in the city of Chicago. No man more sanely or nobly incarnated ideals which are higher than any calling and as great as any enthusiasm."

As *The Chicago Evening Post* said, "Dr. Favill was a man who held in a city of over 2,000,000 inhabitants the position of love, dignity, and influence held by many a lesser-known 'country doctor' in the villages of America."

LIFETIME TRIBUTES

"With him, too, we see comprehensive mental vision, and dominant purpose nobly directed, guided by splendid judgment, a keen reading of character and of the signs of events, and an overmastering sense of justice. His splendid qualities, coupled with an iron frame to carry the burden of all that the mind devises, are freely given to useful public service, and suffusing all, a warmth of feeling and delicacy of sense that insures the highest uses of his gifts."

—DR. FRANK S. JOHNSON, 1908.

"One I know . . . a doctor in Chicago whose American lineage stretches far back of the 'Mayflower,' back of any pale-faced newcomer to this continent. I do not forget that as doctor and as civic leader he has put Chicago and the whole country deeply in his debt. But my memory picture of him (and yours if you know him, as you probably do) will live to inspire and rebuke us even when we forget Chicago and civics and medical ideals. For they are only part of life, while our friend F. is the very incarnation of life as he moves in the city streets. He brings the open country with him and the untarnished freedom of mountain air. You can learn both 'the cause and the cure of civilization' if you will walk with him on Michigan Avenue; for nothing in modern civilization has cramped him, not even its 'serious' clothes!"

—DR. RICHARD C. CABOT, "WHAT MEN LIVE BY," 1914.

"Henry Baird Favill, thirty-five years ago you graduated from this University, and after having completed a course in medicine at Rush Medical College, Chicago, you returned to Madison and for a number of years practiced medicine here with distinguished success. You then went to Chicago where larger fields were open and achieved a like success in the practice of medicine there, as well as in the teaching of medicine as Professor of Clinical Medicine at Rush Medical College and the Chicago Policlinic. While busily engaged as a practitioner and teacher you have nevertheless found time to render important public service in the promotion of a public understanding of the needs of sanitation and preventive medicine, and have been a leader both in local and in national movements which have had as their ends the promotion of preventive medicine. In this work you have illustrated what we like to believe the true Wisconsin idea, active service for the public in appreciation of the benefits derived from public education. As a devoted alumnus, eminent physician, honored teacher, distinguished leader in the development of social welfare through the development of preventive medicine, upon recommendation of the University faculty, and by authority of the Regents, I confer upon you the honorary degree of Doctor of Laws."

—PRESIDENT VAN HISE, University of Wisconsin, June 16, 1915.

"The man was greater than his work. In all the fundamentals of greatness, simplicity, purpose, steadfastness, reverence, he was preëminent, and the results he achieved are the direct expression of his character."

—From an article on PASTEUR, author unknown, sent years ago by a friend as a fitting portrait of DR. FAVILL.

PART ONE

TRIBUTES AND RESOLUTIONS

HENRY BAIRD FAVILL

A Memorial Volume

PART ONE

TRIBUTES AND RESOLUTIONS

MEMORIAL MEETING AT THE CITY CLUB

IN recognition of Dr. Favill's leadership in the activities of this club, of which for two years he was President, and of his many important contributions in the field of public medicine, of social service, and of civic betterment in Chicago, the Directors of the City Club on February 21, 1916, adopted resolutions and arranged a memorial meeting, which was held at the club on the afternoon of February 26. The speakers were introduced by Allen B. Pond, President of the Club, who, in opening the meeting, said:

"Henry Favill—erect, lithe, the head thrown back, the elastic tread, the swinging stride, joyous vigor incarnate: it seemed that he, of all men, should for years to come resist the attacks of disease, the ravages of time. And yet—last Sunday in the faint gray of the early dawn that splendid spirit slipped away into the eternal silence.

"It is fitting that we of the City Club should meet to-day to honor his memory, to pay our tribute to his worth. He was a charter member of the Club; and from the close of its second year to the day of his death he served continuously on its board of managers—as director, chairman of its public affairs committee, as president, and then again as director. We shall miss him sorely, we who knew him, we who admired

him, we who were proud of him, we who loved him. We shall miss his wise counsel, his large patience, his charity of mind, his unwavering courage. Yet even though we are met to-day to voice our grief at his death and our keen sense of deprivation, our feeling is not wholly that of grief. For even in our grief we rejoice that he was the man that he was, had the thoughts that were his, did the deeds that he did, and that, he being such as he was, it fell to us to know him and count him as one of us.

"He was not content to be borne along on the current of life—drifting and aimless like a chip in a stream. Always he breasted the current with a heart of controversy, shaping his course by a dimly seen but none the less truly apprehended ideal.

"He looked out on life from many angles and, from whatever angle he chanced to look, he sought 'to see life steadily and see it whole.' He touched life at many points; and wherever he laid his hand, he helped to do the task or to lighten the load. He was in very truth a tower of strength.

"We shall not wholly replace him; nor yet shall we forget him. From time to time the thought of him will spring forth into consciousness. And whenever we think of him and what he was, we shall thrust to one side our inconclusive wrestling with the enigma of life, our half-hearted surmise of its futility, shall tighten our belts and say in our hearts: Whatever it be or whencesoever it came, life that bears such fruitage is not to be despised; and, come what may, it is worth while to have shared life's chances—its failures and its victories—in the company of such as he.

"First and foremost Henry Favill was the physician who tries to relieve the suffering of those who seek his service; but, high as is this service, he did not rest with this: he was also the physician who strives to ascertain the more remote conditions that environ our lives and that cause

or pave the way for disease and who seeks those larger remedial measures which society itself must organize if we are to strike disease at its very roots. This aspect of Dr. Favill's life will be dealt with by one who knew him in his early manhood, and who has been associated with him throughout his professional career—Dr. Frank Billings.”

DR. FRANK BILLINGS

“I have known Dr. Henry Baird Favill for thirty-five years. When I first knew him he was a student at Rush Medical College, from which he graduated in 1883 with high honors and a reputation of a rational thinker on medical subjects.

“The illness of his father, a physician, necessitated his location with him in Madison, Wis., where he assumed the responsibility of the care of the family and of his father's practice. Inexperienced as he was, he cheerfully and successfully fulfilled his obligations. After ten years of most satisfactory medical service to a large community, with Madison as the center, upon the solicitation of many medical and lay friends he removed to Chicago in 1894. Dr. Favill's medical history in Chicago was that of a successful man, as a practitioner, as a family adviser, and as a social service and civic worker. As a family physician he was ideal. He carried his optimism and hopefulness to the sickroom. He aroused confidence and faith in his skill to manage the patient and his illness to a successful issue. He aroused in the minds of the patient and of the family a confidence in matters not medical, and many leaned upon him.

“He became a clinical teacher in his alma mater in 1893 and in this, as in his other work, he gave satisfaction to his colleagues and to the student body. For many years he was attending physician at St. Luke's Hospital and took an active part in the continued development of that great institution. He was president of its staff at the time of his death. For six years Dr. Favill was chairman of the

Council on Health and Public Instruction of the American Medical Association. He made the work of the Council of great importance to the entire community by coöperating with and coördinating the function of hundreds of organizations all over the country which were attempting to improve the physical and social condition of mankind. He prided himself on his ancestry, and from his maternal grandparents undoubtedly inherited a love of out-of-door life. Perhaps it was this which aroused his great interest in the improvement of living conditions of the poor and of others, and in the establishment of playgrounds, bathing beaches, and other conditions intended to improve the general hygiene of the people.

"Dr. Favill had a magnificent physique and a great brain was housed in his massive head. He was a manly man. He had a wonderful mental poise, continued optimism, and the gentleness of a woman. But with all, he was firm, upright, and a decided opponent of all evil.

"Your loss and mine seem irreparable, and yet we know that great as was the place which Favill filled in this and in the larger community of our country, some one else will take up his work and do it, if not as adequately as he, will still do it and the world will move on. But I am quite sure that the spirit of Favill will live and that we will all remember what he taught and how he lived and will join in saying: 'We thank God that he gave us Favill.' "

Following Dr. Billings' remarks, the chairman read the following telegram from Charles R. Crane:

"DEAR MR. POND:

"I deeply regret that an important and immovable engagement in Washington on Friday evening with another devoted public servant prevents me from being with you on Saturday and testifying in person to the feeling we all share of the irreparable loss Chicago has sustained in the passing away of Dr. Favill.

"The well of his human sympathies, although always being

drawn upon, seemed never to lose its flow. As a physician and as a friend he was just as thoughtful and tender of the small miseries of life, which have so much to do with our comfort and efficiency, as he was of the larger affairs of the city, which mean so much in making it a habitable place and one of which we could be proud. To encourage any one else who was working in this direction he was always there with his splendid talents, his wonderful vision, and his fine presence. There was no evasion, nor excuse, nor rest. It is because he gave his all that we have had to part with him now, when it seemed as though he still had many years of continuing his rarely useful life.

"To few is such capacity for public service given; and we can only hope that for many years to come his story will be widely known and lead others to follow in his footsteps. But not to many others of our fellow citizens could the words so fittingly apply: 'Well done, thou good and faithful servant.'"

PRESIDENT POND: "Dr. Favill touched the city on even another side than that of medicine. He had the true Greek spirit of loyalty to his city, thorough-going devotion, the feeling that every man, no matter what his profession or special task might be, had in addition thereto a civic duty. It is with this aspect of Dr. Favill's life that Dr. Graham Taylor will deal."

GRAHAM TAYLOR

"The unity of life has rarely found finer or more varied expression than in the personality of Dr. Henry Baird Favill. At the last meeting of the Physicians' Club, he struck what might have been the keynote of his life, to which at least his varied activities seemed to be attuned. He said:

"Most of the things that have become matters of common knowledge, more or less accurate, finally are elucidated and classified and systematized by science. Science rarely is the pioneer in knowledge. Science is the final expounder and clarifier of knowledge.'

"To a rare degree this pioneering common knowledge and this clarifying science constituted and actuated the mind and achievements of Dr. Favill. To all his thinking and action he instinctively brought all the common thought and human feeling which gathered about any subject or situation, and let them find expression through the clarifying light and heat of his scientific self-exaction.

"The charm of him was that as a man of science he was always and wholly human in letting by-play and toil, the light touch and the heavy task, rippling humor and courageous decision mingle in his relations at every turn of his multifarious life.

"It was just these human and scientific qualities and resources in such complete combination that gave such efficiency and driving power to Henry B. Favill's citizenship. The whole man was the citizen. His citizenship was himself—all that he was and had, or could become, personally and professionally. He held himself and his profession as a public trust.

"So much more public-spirited was he than merely professional that he never hesitated to urge the community to go to any length to safeguard the public health, at whatever cost to practitioners in his profession.

"Realizing the need of reinforcement and continuity in the movement for higher civic administration and ideals, he became a charter member of the City Club of Chicago and bore his own full share of initiative in projecting its work over which he presided for two years as president of the Club. His presence and the part he took in its discussions and work always became the point at which the interest, confidence, and action of the membership readily rallied.

"It seemed hardly possible that he would or could undertake the arduous, unending, disturbing, perilous work involved in the presidency of the Municipal Voters' League. But he did, in response to what was not so much a call of duty as an opportunity to serve his city by bearing his

share of its public burdens. To the perplexities of the league's personal and public problems, he brought that clarity of judgment, in which loyalty to fact and susceptibility to the human touch, combined to make him as just as he was considerate, as firm as he was fearless. At no loss either of income or of fellowship did he hesitate or complain. Here as everywhere he stood out in the open and took what was coming to him in being a man among men.

"Special interests had as little standing with him as special legislation. For the sake of public safety and the common welfare, he effectively promoted protective and constructive industrial legislation, not only for protection against occupational diseases and dangerous machinery, but also for such compensation for injury and death as is just to employer and employe alike. The American Association for Labor Legislation had no more wise or practically effective adviser than he.

"Still more intensively and technically he knew the science of government would have to be applied to our municipal administration if it ever were to attain the efficiency demanded by public welfare. Therefore, he was foremost in proposing, guiding, and supporting the Bureau of Public Efficiency. There he manifested the versatility of the professional man who could turn business man, of the diagnostician who could judge accounting, of the pathologist who could become adviser to the administrator. And nearest the people, he was just as much at home in supporting the settlement work as a trustee of Chicago Commons and in sharing the neighborhood festivities at Hull House.

"What magnificent proportions and fine strong fibre he had! He was so virile in intellect, scientific in self-exaction, broad in his interests, analytical and synthetic in capacity, quick in apprehension yet mature in judgment, just in caution yet prompt in decision. In action he was gloriously public-spirited, self-abnegating, and fearless. Far flung in vision, he was so human withal, alike when

under the severest stress and strain of his work or in the abandon of his rollicking play. The like of him we have not among us."

PRESIDENT POND: "Dr. Favill gave his thought to those constructive measures that look toward the future, but he also realized that we are carrying with us many men who have fallen short in the race, people who might be considered derelicts, and that something must be done for them not only by individual helpfulness but by organized community effort and organized charity. It is with these aspects of his life that Mr. Sherman C. Kingsley will deal."

SHERMAN C. KINGSLEY

"It is my very great privilege to have known Dr. Favill over a number of years in connection with the field we know as social service, and to say a few words about his work along that line.

"Dr. Favill was an officer and director in a great number and variety of civic and philanthropic organizations. He would have been in the same relation to many, many more, had it been humanly possible for him to respond, for the demands upon him were constant and unremitting.

"There was something about his presence, his genial, commanding personality, which drew people to him. His qualities of mind and heart, his rare judgment, his poise and vision, his sincerity, revealed him as a source of strength which was eagerly sought, not only by the organizations charged with the delicate and difficult task of administering the affairs of the social service field, but also by the social workers themselves, who perhaps in a particular way know and feel the need of genuine leadership, of advice, of encouragement, of sympathy and of strength.

"Dr. Favill was especially sought by such agencies and individuals in their big problems and perplexities, and no one, I believe, ever went to him on such a quest, who came

away without being strengthened and helped. The Doctor listened to all these problems with an unhurried interest and a calm reassurance. In some way he was able to keep his mind and heart in tune with the larger realities and unfettered by the worries and complexities, by the hampering, dissipating little annoyances that weaken and handicap.

"Dr. Favill's knowledge as a physician, his interest in social affairs, his thoroughgoing humanity, his friendship with people, running through the whole gamut of our social life, and perhaps more than anything else his absolute refusal to be fettered by the turmoil and perplexities of our modern life, made him a man of singular ability to serve. His power in this direction was noted and often commented upon. His addresses on such subjects as 'The Police Power,' made in Washington at the time of the International Tuberculosis Conference, on the 'Cause of Child Labor,' 'Social Insurance,' 'The Public and the Medical Profession,' are evidences of his grasp and interest in the larger phases of social problems.

"His service to individuals, both the humblest and most obscure and those also of the largest social and industrial standing of our community, and in the country, are indications of the wide range and grasp of the Doctor's life and influence.

"The psalmist of old exclaimed: 'I will lift up mine eyes unto the hills whence cometh my help.' Doctor Favill must have found the secret of the large ministries which the open fields, the woods, the hills, can yield each man who understands and knows how to use them.

"There never is a time when the loss of such a man can be easily understood or endured. His loss just now seems peculiarly heavy when large-minded, unselfish devotion are so sorely needed.

"In dealing with his patients, the doctor brought to the sick room a strength and reassurance, a new courage for the fight. He was not stampeded or panic-stricken. He did

not cause the patient's temperature to rise or his fighting qualities to waiver because of any breathlessness or false motions on his own part. He breathed courage and hope. He was a mighty rock of strength. Those very same qualities the Doctor brought to boards of directors and individual workers in their troubles and problems. He was able always to make people do their best and to impart new courage and new hope.

"Those of us who knew the Doctor's spirit of good cheer and who knew his friendship and caught the inspiration of his radiant, splendid spirit, will never forget him. He was a leader who inspired confidence and courage and joy of service. We can honor such a man only by trying to carry on the kind of life he lived. When Elijah of old, prophet and warrior, knew that the time of his departing was near at hand, he said to Elisha, the man who was to follow him, 'Ask whatsoever you will and it shall be granted.' Elisha's reply was: 'I pray thee, that a double portion of thy spirit descend upon me.' Our city, our State, our country need a baptism of such spirit, such ability as that lived among us by our dear friend, Dr. Favill. This same narrative to which I have referred goes on to say: 'And Elisha took up the mantle which Elijah laid down.' Shall not thousands among us strive harder for the bigger, richer life because we knew him?"

PRESIDENT POND: "Doctor Favill was an all-round man. He had, too, in a high degree that quality which the ancient Romans called magnanimity, great-mindedness. He was a high-hearted human being, adapted for all expressions of life; a friend as well as a working man. It is with this all inclusive aspect of Dr. Favill's life that Mr. Frank H. Scott will deal."

FRANK H. SCOTT

"Harry Favill was one of nature's masterpieces. Intimate acquaintance was not necessary to a recognition of his

distinction. There was that in his features, the lineaments of his countenance, his form and bearing, which set him apart from other men, and stirred deeply the imagination.

"In physical appearance he seemed of another age, an age more virile and heroic, who by some chance had strayed out of his own time and natural environment, into our own commonplace day, and the conventional life of a great modern city.

"There was revealed in his face a calm confidence which stamped him as a master of circumstances, never their creature. That our eyes shall never be gladdened again by the sight of that man, so exceptional in his physical attributes, is in itself no little loss.

"But it was the knowledge that we had of the spirit within, which caused the peculiar shock which his death wrought; for the spirit of the man was as rare as the form which embodied it. We have heard to-day of his activities in his profession, in civic affairs, and in the care of the poor and the afflicted. They were only the more obvious manifestations of an unremitting, but not vocal, sympathy for his fellow men. At the bottom of it all was this fact, he was a rare friend of his fellow men.

"He became to many of his patients much more than a minister to bodily ailments. To which of us who knew him did the news of his death not bring instant thought of homes to which his death would mean not merely the loss of a physician, but of a wise counsellor in the most intimate affairs of life. We knew that it struck at many as though a sustaining prop had suddenly fallen away from the structure of their lives. They leaned upon his strength from day to day and from year to year.

"His civic work gratified no personal ambition, nor did he find in it any of the excitement of the game. It was a burden assumed by an overburdened man, because of his desire to serve his fellow men, and to better the conditions under which they lived. He brought to it a courage which

took no note of consequences to, or criticism of, himself. He looked to his own conscience for the justification of his acts, and finding it there, was not fretted by the judgment of others.

"But various as were his activities, as publicly known, they were by no means the full measure of his service. The door of this friend of mankind was open, and his wisdom and scientific attainments were at the service of all who came to him, however humble.

"His interest in young men was keen, and he found time to manifest it in ways that to most busy men would seem impossible.

"Favill found time for the intimacies of private friendships. He was a member of certain little groups of men which for years have been accustomed to meet at stated periods, when the serious things of life were, for the most part, thrown aside, and where the assured confidence of mutual respect and affection made possible the freest interchange of give and take, of raillery and wit, and on such occasions none struck keener blows, or took them with better grace than did he. He was born for friendship.

"Often I have wondered how Favill accomplished so many and such different things, and indeed, why he undertook so much outside of the profession which itself imposed such burdens upon him. The answer came in the funeral service. You will remember that Dr. Gunsaulus told of an occasion when Dr. Favill addressed the Young Women's Christian Association, and opening the Bible read that chapter beginning: 'Although I speak with the tongues of men and of angels, and have not love, I am become as sounding brass, or a tinkling cymbal.' Therein that self-contained man revealed himself and explained his life. The note he struck that day was the note to which his heart was tuned. His was the great love of one who would lay down his life for his friend; he was the friend of mankind, and to the service of mankind he devoted his life."

OTHER MEMORIALS

BOARD OF TRUSTEES OF RUSH MEDICAL COLLEGE

IN MEMORIAM—HENRY BAIRD FAVILL, M.D.

PROFESSOR OF CLINICAL MEDICINE, RUSH MEDICAL COLLEGE

IN the death of Dr. Henry Baird Favill, Rush Medical College has lost one of its most distinguished alumni and faculty members. He graduated from the College, February, 1883, and became a member of its faculty, as adjunct Professor of Medicine, in 1895, which position he occupied until, in 1898, he was made Ingals Professor of Therapeutics, a chair endowed by the late Dr. Ephraim Ingals. In 1906, finding that his lecture work in therapeutics consumed more time than he was able to give to it, he resigned this chair, and was made Professor of Clinical Medicine, offering thereafter a clinical course during a part of each year at St. Luke's Hospital.

Dr. Favill was born in Madison, Wis., August 14, 1860. He was always an earnest student of heredity, and his own physical and mental characteristics afford an interesting illustration of the laws of inheritance. His father, one of the strong men in the first generation of physicians in Wisconsin, after its admission to statehood, possessed the powers of keen, accurate observation, sound judgment, and the uncompromising hatred of all pretense and sham, which were so characteristic of the son. With this hatred of sham, however, there was mingled in the father a somewhat cynical attitude, which was tempered in the son by the gentle, gracious kindness of a beautiful mother. In his physique Dr. Favill was an interesting example of atavism—his tall, erect figure, free swinging gait, and his

facial contour presenting the characteristics of his Indian forebears, of whom he was very proud, much more strikingly than they were to be seen in either his mother or grandmother, through whom he traced his descent from Kewinoquot, a chief of the Ottawa tribe.

Environment and training played an important role in his development. The beautiful "city of the lakes," where his youth was spent, offered abundant opportunity and inducement for fishing, hunting, boating and the like, and in these he cultivated that love of out-of-door life, which was one of the important tenets of his medical philosophy, and which he exemplified in his personal habits throughout his life.

Completing his preparation for college in the Madison public schools, he entered the University of Wisconsin at the early age of sixteen, and graduated therefrom with the degree of A.B. in 1880, three months before his twentieth birthday.

He was not an especially bookish student, but he was keenly alert in class room and laboratory, and he carried away from his college course a much larger fund of useful, well-digested information, and secured from it a more effective training of his faculties than do most students. He was fortunate, too, in the circle of friends and intimates of the family—a cultured, high-minded group, association and conversation with whom was in itself a liberal education. In the student body of less than four hundred he was a prime favorite, active in the happy, care-free college life of that day.

To John Bascom, president of the University of Wisconsin in those years, and one of the great moral forces of his time, he attributed much of the inspiration to high ideals of life and the service of humanity, which marked his later years.

About the time he entered Rush Medical College, in the autumn of 1880, his father developed cataract, which

threatened blindness, and Henry Favill realized that the burden of caring for the family was soon to fall on his shoulders. He set about resolutely to fit himself for the practice of medicine, and embraced every opportunity to acquire the necessary training. Opportunities for practical work were very limited in the medical curriculum of that day, and he eagerly accepted the position of prosector to the late Professor Parkes, who held the chair of Anatomy, and for two years assisted in the preparation of the cadavers used for demonstration in the lectures on Anatomy. He found opportunity also to acquire experience at the bedside by relieving the interns at the Cook County Hospital and St. Luke's Hospital in their vacation periods. Graduating in 1883, he returned to Madison, and entered into practice with his father. He thus found at once a considerable clientele, which rapidly grew, and in a few months he was immersed in a large and exacting practice.

In 1888, when the death of the Professor of Surgery in Rush Medical College, the distinguished Moses Gunn, led to the promotion of Professor Parkes to that chair, and the calling of Dr. Bevan to the chair of Anatomy, he was offered the position of Demonstrator of Anatomy, but he did not feel that he could leave his established practice in Madison at that time. Moreover, his inclination was never toward the practice of surgery, to which, in those days, the teaching of Anatomy was presumed to lead, and so he declined the position and recommended a fellow student of his college days. In 1894, yielding to the urgent persuasion of some of his friends in Chicago, who had long felt that so strong a man should be at work in a larger field, he came to Chicago and entered into a general practice. The conditions on the north side, where he established himself, were ripe for the advent of such a physician, and in a remarkably short time he was in command of a large practice among people who appreciated thoroughly the efficient, conscientious service which he rendered them.

Few men have been more highly endowed with all the requisite qualifications for general practice, and fewer still have made such splendid use of them as Dr. Favill. His commanding physique, his cheerful manner and keen sense of humor, his unremitting, conscientious devotion to his patients, and his large fund of sound common sense, inspired confidence at once when he entered the sick room. Not only did he command the confidence of his large and influential clientele as their family physician, but impressed with the soundness of his judgment, his absolute integrity, his high ideals and his breadth of view, they were, in later years, glad to be guided by his advice in supporting measures for the public weal, and so to become co-workers with him in such important movements as the anti-tuberculosis crusade.

As a lecturer and writer, Dr. Favill, in his earlier years, had sometimes a rather involved style. In the correction of this he resolutely schooled himself and in time became one of the most forceful and effective speakers, especially to a non-medical audience.

Dr. Favill's largest service was rendered in the last decade of his life, as an active participant and leader in movements for the public good, both medical and otherwise.

This phase of his activities seems to have been entered upon definitely, when he became one of the founders of the Chicago anti-tuberculosis organization. He was, for most of the time, antedating the taking over of the work by the city of Chicago, its president, and the funds for its maintenance were largely secured by him. How efficient was this service is evidenced by the present magnitude of Chicago's anti-tuberculosis organization.

In the City Club, of which he was a charter member and one of its first presidents, Dr. Favill found a congenial field of activity, and was a large factor in making of it one of the most useful agencies for good that Chicago has known. His interest in civic affairs in this club led to his selection

as president of the Municipal Voters' League, which has done so much to purge the City Council of the "gray wolves" that have infested it. The important duties of this position were not to be discharged without opposition and the estrangement of some strong influential patrons, but he swerved not an iota in the courageous discharge of its duties as he saw them.

Of the many other movements to which he gave of his time and strength, it is not possible to speak in this brief sketch, excepting of the one which gave him the largest scope and brought him into national prominence. In 1910 the American Medical Association created the Council on Health and Public Instruction, whose function it is to promote the education and advance the interests of the public along health lines. Almost from its creation he was chairman of the Council, and it is doubtful if any man in the medical profession could have directed its activities as sanely and effectively as did Dr. Favill. Wisely keeping the Council out of all participation in political activity, and holding it firmly to the line of an educational propaganda, and seeking the fullest and most effective coöperation with other national organizations having purposes in common, he was largely instrumental in making the Council one of the strongest, most productive agencies for good in the field of public health. Dr. Favill saw much more clearly than most physicians the strong, steady trend of medicine in the direction of preventive as contrasted with curative medicine, and the large part which sociologic principles and methods must play in its development. He believed that this development must come almost wholly through the universal education of the people, and that only on the basis of a widespread understanding of the possibilities and essential requisites of hygiene and sanitation could effective legislation be secured.

In his direction of the work of the Council he displayed rare administrative and executive ability. Unyielding in

his fight for basic principles, but tactful and receptive in the discussion of details of plans and methods, he had a keen sense of discrimination and proportion in distinguishing the essential from the non-essential points under discussion. He left the details of the work in hand to those assigned to that task, and when these were ready for presentation he was a prince of listeners. Tilted back in his chair, his fine head thrown far back resting on his clasped hands, and his gaze fixed on the ceiling, he would listen attentively to a detailed statement of the items to be considered and maybe a protracted discussion—and then go direct to the core of the matter and set forth the real essentials in a brief, clear, logical statement.

The wide scope of his interests is well exemplified by his election as president of the National Dairy Council the year before his death. For him the breeding of dairy stock was an avocation—a diversion incidental to an intensely busy life in lines far remote. And yet so live was his interest in it, so thorough his mastery of the technical problems involved, he impressed this considerable and important group of men who were devoting their lives exclusively to this industry so strongly, that he was recognized as a leader among them in their own line of activity.

His professional attainments were abundantly recognized by the medical fraternity. He was a member of many medical societies, local and national, and an officer, at one time or another, in several.

He lived to see his son, the only child of his union with Susan Cleveland Pratt, to whom he was married in 1885, graduated in arts from Yale University, in medicine from Harvard University, as an intern in the Massachusetts General Hospital, and finally established in practice with him and following in his footsteps as a teacher of medicine in Rush Medical College.

In recognition of the great service of Henry Baird Favill

to the people of Chicago and of the nation, and of the truly unique position which he occupied in the medical profession in America, in grateful recognition of his service to Rush Medical College, and of the distinction which he brought to it as an alumnus and a member of its faculty, the trustees and faculty spread this memorial sketch upon its records.

RESOLUTION ADOPTED BY THE WISCONSIN
SOCIETY OF CHICAGO

AT A MEETING HELD FEBRUARY 21, 1916

IN MEMORIAM—HENRY BAIRD FAVILL

ON the morning of February 20, 1916, Death summoned our brother, Henry Baird Favill, to the immortal life in the Great Beyond.

In the full flush of vigorous manhood, happy in the employment of a magnificent physique and a splendid mental power for the benefit of his fellow men, with characteristic fearless dignity, he expressed his preparedness to meet the unexpected command, in these words: "If I am called, it will be all right."

Born at Madison, Wis., on August 14, 1860, he inherited the virile mental and physical characteristics of splendid ancestors. From his father, Dr. John Favill, a love of science and a dislike of hypocrisy and sham; from his mother a mental and physical fibre which distinguished him among men. Reared in an environment of refinement and the atmosphere of culture of a university city, he developed those rare qualities of mind and heart which awakened respect in all who came in contact with him. His friends were numberless and those favored with intimate association loved him.

Before he was twenty-three years of age, he was prepared for life's work by the classical course at the University of Wisconsin and medical study for three years in Rush

Medical College. The severe illness of his father compelled him to immediately assume the double burden of responsibility of the care of the family and of his father's medical practice. Young and inexperienced, he proved his qualifications and character by successfully meeting every obligation.

For thirty-three years Henry Favill enjoyed as few men do the arduous toil of a successful physician. As a family doctor he aroused the confidence of patient and friends in his ability to apply all the knowledge which modern medicine affords, in the recognition of the cause of disease and in the application of rational measures to the prolongation of life and the relief of suffering. To many he was more than physician; for he helped them to solve the many problems which vex the mind, by a judgment as rare as that of a Solomon. He enjoyed the respect of the members of the medical profession, who added to his burdens by demanding his aid in the diagnosis and management of obscure and severe diseases. He justified the confidence of patients and physicians alike, because of the honest expression of his opinion and the frank acknowledgment of his inability, in rare instances, to recognize obscure disease conditions.

He affiliated with local, State, and National medical organizations and took an active part in the scientific proceedings. By members of the medical profession of the whole country he was known as one who possessed a profound knowledge of medicine and all that pertains to it, and he was noted as one whose horizon was big and broad in regard to all the problems of life. Early in his career he recognized the importance of preventive medicine. To the study of these problems he devoted much time with gratifying practical results. As the chairman of the Council on Health and Public Instruction of the American Medical Association, he developed and organized a method of coöperation of hundreds of organizations, in the various fields

of health betterment work, which will always be a credit to his masterful mind and rare judgment.

For twenty years, the best of his life, he lived and worked for the people of Chicago. In spite of the enormous work in private and hospital practice, he took the time necessary to make his influence felt in social service and civic life. As president of the City Club he helped to mould its policies and to make it a potent influence for good in Chicago and elsewhere. As president of the Municipal Voters' League he fought political spoilsmen to a finish, disregarding the enmities aroused among wrong-doers and unmindful of the plaudits of others, in the fulfilment of his ideas of the duties of a citizen.

But Henry Baird Favill did not spend all of his time in work. He enjoyed the society of friends. He loved books and music and artistic things. But above all he loved the sky, the mountains and canyons, the hills and valleys, the woods and streams, and all living things both tame and wild. Perhaps he inherited from a maternal grandfather, Kewinoquot, a chief of the Ottawa tribe, his love of nature as well as the distinct magnificent physique of his American ancestor. His domestic life was continuously blessed by the devotion of Susan Cleveland Pratt, whom he married in 1885. One son, John Favill, was born to them. This son, the pride of his life, followed the paternal line of ancestors and is a successful practicing physician.

Henry Baird Favill, our friend in sickness and health; our co-worker in social service and civic duty; our colleague in social and scientific communion and our playfellow in the woods and streams, we shall miss the stalwart form, the smiling hearty greeting, the ready wit, the fine mental poise and sound judgment and the true friendship which you gave us.

We shall carry Henry Favill in our hearts and minds forever, but that those who come after us, as members of the Wisconsin Society of Chicago, may know of our respect

and love for him, we shall spread these words upon the records of the society.

(Committee) HORACE KENT TENNEY
HORACE A. OAKLEY
SAMUEL FALLOWS
FRANK BILLINGS, *Chairman*

RESOLUTION ADOPTED AT THE 247TH REGULAR
MEETING OF THE COMMERCIAL CLUB
OF CHICAGO, MARCH 11, 1916

HENRY BAIRD FAVILL

AUGUST 14, 1860—FEBRUARY 20, 1916

DR. HENRY BAIRD FAVILL was the only man ever elected to the Commercial Club without commercial connections in Chicago. It was a unique distinction, given and received. He had won the highest honors of the medical profession, but this club sought him because of his service to the physical and moral health—the political, humanitarian, and educational life—of Chicago.

Tall, straight, sinewy, with head held high, he was brother to his native pines and spruces. His striking, impressive personality expressed, while it accentuated, his exceptional strength, poise, sagacity, and kindliness. We have hardly among us another such powerful, definite, and rare individuality. He was picturesque, yet free from eccentricity. He did much to develop, he did nothing to emphasize, the advantages which nature gave him.

He had a confident strength and freedom and courage of mind and spirit as well as of body. In office and hospital and medical class-room, in the Municipal Voters' League and its city campaigns, in the civic enterprises of the City

Club, in the great war against tuberculosis, in the beautiful organized efforts to save children—he was conspicuous only because he was so constantly devoted and helpful. In the multitude of his human ministrations he moved with a vital joyousness and hope, a quiet energy, directness, and effectiveness.

Though ready and expert of speech, and very democratic and approachable, in an unusual way and to a remarkable degree, he let what he did tell of itself and him. His seemed to have been a mind—was it his Indian blood or his conscious will?—that reported not its processes and activities but only its conclusions. It was his habit to make his tongue wait upon his mind, and to make both servants of the truth. He confessed ignorance, and stated well-founded opinions or convictions, in the same modest tones of candor. The one called forth implicit trust in him as strongly as the other.

His face never quite lost the look of farseeingness and of high thinking. His were the face and eyes of an intellectual mariner, or *coureur du bois*, who loved the journey, whatever befell, and meant to see its beauties and its dangers fully. He was no dreamer or visionary, but a very practical idealist, earnestly intent on present human problems. Seeing so much the seamy side of life only widened his sympathy and increased his desire to do a man's part in human betterment. Thus, without showing by word or act that he cared for these things, he won great influence in every group in which he ever was, and deep admiration and devotion and affection.

And so, as one of many groups, the Commercial Club records its sense of the city's loss of a chief citizen, of the community's loss of a generous helper, and of our own irreparable loss of an inspiring associate and beloved friend. Grieving that he was taken in his prime, we yet rejoice in the victorious life that he led, in all that it was, and in the

memory of it that long shall be. We must reverence human life since it bears such fruitage.

(Committee) EDGAR A. BANCROFT
CYRUS H. McCORMICK
ALLEN B. POND
JOHN W. SCOTT, *President*
LOUIS A. SEEBERGER, *Secretary*

RESOLUTION ADOPTED BY THE COUNCIL OF
THE CHICAGO MEDICAL SOCIETY

MARCH 14, 1916

HENRY BAIRD FAVILL, long an honored and valued member of the Chicago Medical Society, has passed from among us. He was a loyal member, a strong councilor, an important presiding officer, a worthy antagonist, and a staunch friend. He was a public benefactor, a hard worker for the public good, powerful for what he thought the best, tolerant of honest opponents in discussion and debate; verily a true and gentle knight.

The Council of the Chicago Medical Society wishes to express the general grief at his death and to convey the sympathy of its members and of the members of the Society to the family of our colleague.

RESOLUTION ADOPTED BY THE CHICAGO
PATHOLOGICAL SOCIETY

APRIL 10, 1916

THE Chicago Pathological Society deeply feels the loss sustained in the death of its fellow member, Dr. Henry Baird Favill, and expresses its most grateful appreciation of the memory of his magnificent personality and aggressive humanity.

JOHN MILTON DODSON, *President*
GEORGE H. WEAVER, *Secretary*

RESOLUTION ADOPTED BY THE TRUSTEES OF
THE ELIZABETH McCORMICK
MEMORIAL FUND

THE surviving trustees of the Elizabeth McCormick Memorial Fund desire to enter upon the record of their proceedings an expression of their sorrow at the death of their associate, Dr. Henry B. Favill, and of their sense of the great loss which the Fund has suffered in his death. From the time of its establishment to his death he brought to the service of the Fund a rare knowledge of the field covered by its operations, and a sanity of judgment which led his associates to lean more and more upon him as time passed and to follow his lead with implicit trust and confidence.

The reserved composure of his countenance and manner was doubtless but a faithful reflex of one phase of his character which made him the strong self-reliant man that he was. But his associates in those activities of his life which were directed toward social amelioration and especially toward child welfare, were not slow to discover that coupled with an austere self-control there was in him a pity for the weak, the helpless, and the suffering, that had the depth and force of a passion. And as if to complete his endowment for work of the kind which the Fund has undertaken, he had the insight, so rarely coupled with that sense of pity, to see clearly the dangers that attend indulgence in unrestrained, indiscriminate pity.

The loss to the Fund of a trustee so endowed is an irreparable loss.

RESOLUTION ADOPTED BY THE BOARD OF
DIRECTORS OF THE
NATIONAL DAIRY COUNCIL

AT A SPECIAL MEETING HELD FEBRUARY 28, 1916

IN the death of Henry Baird Favill the National Dairy Council loses its president and the dairy world one of its most loyal, most devoted, and most efficient factors.

Lamenting their losses with a grief that is personal and a full appreciation of their disastrous effect upon the dairy industry, the members of the National Dairy Council thus formally express to the family of Dr. Favill their deepest sympathy and their keen sense of appreciation of his devoted and distinguished services for the advancement of the dairy industry.

(*Directors*)

W. W. MARSH	JOHN LEFEBER
M. D. MUNN	H. S. EARLY
H. O. ALEXANDER	W. J. KITTLE
H. B. OSGOOD	WALTER WEST
JOHN W. KOBBE	H. BROWN RICHARDSON
GEORGE E. HASKELL	O. F. HUNZICKER
J. J. FARRELL	H. A. HARDING
LOTON HORTON	W. E. SKINNER, <i>Secretary</i>

RESOLUTION ADOPTED BY THE HOLSTEIN-
FRIESIAN ASSOCIATION OF AMERICA

JUNE 7, 1916

DR. HENRY B. FAVILL became a member of the Holstein-Friesian Association of America on December 16, 1910. He was then engaged in breeding purebred Holstein-Friesians on his farm at Lake Mills,

Wis., and practicing his profession in Chicago, and had become well known to our members throughout the Middle West. Upon the occasion of our annual meeting at Syracuse, N. Y., in June, 1911, Dr. Favill made an address upon the subject of tuberculosis in cattle. It was at this time that the outstanding ability and greatness of the man were impressed upon our membership, and those who listened to his thorough and practical exposition of this most perplexing subject and its relationship to the cattle industry recognized that a master mind had spoken.

At the annual meeting of 1914, held at Chicago, he was unanimously called to accept the vice-presidency of the Association, and had served continuously thereafter up to the time of his demise, being conscientiously in attendance upon every meeting, whether of the directors or of members, contributing generously of his valuable time, and interesting himself in every detail of our work and its purposes, thus qualifying himself to bring his powerful mind to the full consideration and understanding of our problems and rendering invaluable service in their solution.

That he was deeply interested in Holstein cattle and in the future of our organization was manifest in every way; that he realized its future was evidenced by his comments and suggestions of a constructive character, and it was hoped that we might long have his services. In his loss, we, as an organization, have suffered a great misfortune. Those who knew him personally and realized his sympathy, courteousness, and friendship are indeed to be consoled with.

Dr. Favill's work with our organization and cattle was but a minor matter, comparatively, in his life. As a physician he was not only of the highest rank in this country, but he was also a leader in co-related effort for the public good and worked assiduously for such safeguards of the health of the community as proper sanitation, the inspection of foods, and the regulation of medical practice.

He was deeply interested in, and sacrificed much of his time and energy to, civic and social conditions and the improvement thereof; and he was a charter member and for two years president of the City Club of Chicago, an organization widely known in connection with such work.

He was attending physician of St. Luke's Hospital and chief of its staff at the time of his death. For six years he was chairman of the Council on Health and Public Instruction of the American Medical Association and made its work of great importance by coöperating with, and coördinating the functions of, hundreds of organizations all over the country which were attempting to improve the physical and social conditions of mankind. He undertook the arduous, unending, disturbing, perilous work involved in the presidency of the Municipal Voter's League. The American Association of Labor Legislation had no more wise or practically effective adviser than Dr. Favill. He was foremost in proposing, guiding, and supporting the Bureau of Public Efficiency and thus applied intensively and technically his knowledge of the science of government. In settlement work he was much at home as a trustee of Chicago Commons. His civic work gratified no personal ambition; it was a burden assumed because of his desire to serve his fellow men. His wisdom and scientific attainments were at the service of all who came to him. He was the friend of mankind and to the service of mankind he devoted his life.

His qualities of mind and heart, his rare judgment, his poise and vision, his sincerity, revealed him as a source of strength which was eagerly sought by organizations and individuals in their big problems and perplexities. His grasp and interest in the larger phases of social problems were evidenced by his addresses on such subjects as the "Police Power," made in Washington at the time of the International Tuberculosis Conference, and on "The

Cause of Child Labor," "Social Insurance," and "The Public and the Medical Profession."

The spirit of his good cheer, his radiant splendid spirit, will never be forgotten by his personal friends. He was a leader who inspired confidence and courage and joy of service. He was a manly man of wonderful mental poise, unending optimism, and the gentleness of a woman. There are those among us who will strive harder for the bigger, richer life because we knew him.

RESOLUTION ADOPTED BY THE SOCIAL SERVICE CLUB

AT A MEETING HELD FEBRUARY 21, 1916

IN MEMORY OF DR. HENRY BAIRD FAVILL

IN the death of Dr. Henry Baird Favill the Social Service Club, numbering more than eight hundred members, and representing practically all the charitable and philanthropic agencies in Chicago, has lost a friend in whom there was a combination of sympathy, vision, understanding, and courage that was rare, if not unique. His splendid and commanding presence won immediate attention and admiration, and his qualities of mind and heart, friendship, allegiance, and respect.

Dr. Favill's services were in demand by the boards and organizations represented in our club because they recognized his leadership and ability. Perhaps more than any other man in the city he was sought for by such agencies, and by individuals as well, in the big problems and perplexities, and no one, we believe, ever went to him on such quests without coming away strengthened and helped. He listened to all these problems with unhurried interest and calm reassurance. In some way he kept his mind and heart in tune with realities and unfettered by worries and perplexities, so that his judgment reflected the larger verities.

Those who knew Dr. Favill and had the opportunity personally to catch his spirit and joy of living and serving will never forget him. We feel that he was one of the best embodiments of good fellowship and efficient citizenship we have ever known, and that the greatest thing we can wish for ourselves and for our community in trying to honor him, is that "a double portion of his spirit" may descend upon us.

For the Social Service Club:

SHERMAN C. KINGSLEY
HELEN M. CRITTENDEN
WILFRED S. REYNOLDS
ADELAIDE MARY WALSH
PHILIP L. SEMAN

A PERSONAL TRIBUTE

BY CYRUS H. McCORMICK

AS a personal friend of Dr. Favill, it is a privilege to pay his memory a brief tribute of regard, not for myself alone, but for all those of the International Harvester Company who had come in contact with his rare personality.

Most men who attain any eminence achieve it by concentration upon one interest. This man was so big in brain, heart, energy, and character that, in addition to a remarkable professional career, he had time and strength to render valuable service for the civic good—to be an uplifting force in his community, giving royally of his personality and ability. I call to mind no man using a matchless strength of body and mind and soul so effectively, so helpfully, and so unselfishly.

Each one of us whose life he touched is grateful for the memory of Henry Baird Favill, skilled in healing human

ailments, wise and kind in comforting weary hearts, inspired to guide us through our perplexities—a man whose life and work and character were to all those of his time and place like a great light shining steadily from a hilltop.

HENRY FAVILL WAS ONE REAL MAN — DOCTOR WHO WAS EVERYBODY'S FRIEND

BY CARL SANDBURG

I WANT to throw a flower on a man's coffin to-day and then go on with my work. They are burying Henry B. Favill and he's the man I want to remember for to-day.

There's a beauty about death when it takes a man with a face like that of Favill. He was a white man with a strong dash of Indian blood in him. Or to put it another way, he was an Indian with white man's blood. Anyway, his face had the sad, stern power written on faces of some of the finest Indians—the deep, quizzical thoughtfulness of a Lincoln face; one of those faces of power and dignity even in a varnished and nickel-plated coffin sold by modern undertakers.

Now the reason I want to remember him with a flower to-day is because he was a man of light and vision. I don't care so much about his record as a leader in the Municipal Voters' League. What I remember out of his speech and writing is that the human body is naturally a clean, sweet, and beautiful thing of life. As a physician and as a social scientist, he saw waste and wreckage of human life in mills and workshops, in homes and sleeping-rooms. In a patient, quiet, persistent way he accused his fellow men of doing wrong in allowing the long work day, that breeds fatigue toxins in the blood of factory girls and robs the rose color from the cheeks and the quickness from the eyes.

He was quoted in State legislatures along with Louis Brandeis and Josephine Goldmark as an authority on night work and the long hours—how they operate like poisons and carry early death.

He was a director of the American Association for Labor Legislation and an active worker in the anti-tuberculosis organizations.

To him the terrible thing about the white plague was that it is "preventable." Plenty of fresh air in sleeping-rooms, workshops, and street cars, plenty of good food and enough rest hours in the workday—and there would n't be any disease called consumption, racking thirty-five hundred people to death every year in Cook County.

Favill was one of the men who started the nation-wide agitation for better health fundamentals in American living conditions. Instead of "bigger and better business" he was always talking "healthier and happier people."

I am glad for a chance to use his funeral as a feature story to speak the chief message of his life, the message that his big employers, like Julius Rosenwald, Eddie Hillman, and Charlie Piez, have a direct control over the health of the thousands working for them through control of the air supply, the working hours, and the wages that dictate housing conditions.

And I feel better at throwing a sheaf of green leaves and an American Beauty on the coffin of Henry B. Favill to-day because in his circle he was a great and useful agitator and teacher.

TRIBUTE BY REV. DR. E. G. UPDIKE

DR. HENRY BAIRD FAVILL is stricken in the very prime of his splendid manhood. I regard him as one of the very greatest men who have gone out from the University of Wisconsin, or who was born and reared in this commonwealth. He was great in his physical

manhood. He commanded your attention at once. What a body for a great soul!

He was great in his profession. He worked with the most eminent men in the medical profession of the nation.

He was greater than his profession. As a public-spirited citizen he easily ranked with the greatest philanthropists and publicists of Chicago.

There was no good cause that did not enlist his interest and in the most unselfish way he stood ready to serve the public on all occasions.

He was great in the range of his vision, in his common sense, and the almost instant ability which he had to pronounce judgment on the most important matters—judgment which seldom had to be changed.

He had a vocation and an avocation. His avocation had come to be a matter of as absorbing interest as his profession. He had purchased what was originally his grandfather's farm at Lake Mills, Wis. He had developed what was coming to be regarded as one of the most wonderful agricultural plants in the State. He had not been reared on the farm but he loved it. He had the spirit of the true farmer. He mastered every detail and he knew the name and history of every one of the one hundred and seventy-five purebred cattle on his place. Nothing escaped him. No experiment station did its work more carefully or scientifically than he. He told me that out of his farm he was getting an intellectual stimulus equal to that of his profession.

All this is but an indication of the greatness of the man. He would have been great anywhere and with almost any kind of responsibility placed upon him. Those of us who stood near him loved him. He was one of the most likable men you will ever meet—so noble, so unselfish, so full hearted.

How can we adjust ourselves to the fact of his death? How can we fathom the mystery of his untimely removal?

TRIBUTE BY DR. ARTHUR M. CORWIN

MEDICINE, politics, education, civics, culture, philanthropy—all of these have lost a mighty advocate in the untimely death of Dr. Henry Baird Favill.

It is rarely indeed that we find a physician well posted in the history of his profession and in vital touch with the proof sheets of medical science; extremely busy as a practitioner, enjoying the confidence and patronage of a large private practice and much in demand as a consultant; an able lecturer to medical students; a leading spirit upon many important committees working for the national betterment of the profession and the public; a dominant force in economic, political, and philanthropic movements; occupying numerous positions of trust; a writer and speaker of force, widely interested in human affairs. Such a man was Dr. Favill.

He was a splendid fellow in every way. If foes he had, they must have been hostile to his high ideals or jealous of his leadership rather than hostile to him. Personally, he attracted men by his virile traits, his wise diplomacy, his fine sense of humor, his kindly attitude toward humanity, his ardent friendship for all outdoors, and his keen interest in living things.

Blest with a rugged constitution which defied strain and stress, he was a man of commanding presence. When he rose to speak in any assembly, his tall, magnificent physique, athletic bearing, handsome face and features full of character aroused anticipation of what he had to say which was never disappointed. In later years, by much practice, he had mastered a clear, trenchant style of expression which went to the heart of things. Coupled with a natural power of eloquence, exceptional command of language and a voice full, resonant, and musical, Dr. Favill had a certain grace and force about him that carried conviction and spoke for leadership.

He was proud of the Indian blood that flowed warm and red in his arteries; and I doubt not that the charm which nature and outdoor life had for him and his love of animal life were part and parcel of this heritage.

In going he has left a void which it will be difficult to fill by any one individual. He has left a wide circle of real friends and ardent admirers in all walks of life. He has left a permanent impress of his life and character upon our times. Nor shall his noble influence cease with his going.

No one may do his best by slavishly imitating another; he can only be himself at best. But great men and women are invaluable sources of suggestion in developing the finest and strongest gifts we have. Dr. Favill sought to develop himself in service of others. He lived his own life in his own way. His personality was all his own. To emulate this attitude shall be worth while.

Go forth to be thyself, oh, Man!
 Seek not to ape another's plan;
 For imitation crude but meets
 The needs of noisy parakeets
 And monkey-folk, a thumbless nation,
 With thumbless grip upon creation.
 Go be thine only self, with will,
 And thus thy destiny fulfill.

TRIBUTE BY DR. PHILIP KING BROWN

TO few men has been given the ability for public and personal service that marked Henry Favill's career. The first was shown by his unerring instinct for reaching to the bottom of what was wrong and it made him all his life an advocate of preventive medicine. The trail he consistently blazed in this field from the start has become the highway along which medicine of our day must advance. But the other gift for personal service was not less a characteristic. The ability for catching instantly

the other person's point of view and simply and directly giving sympathy and help was not all. He knew how to develop character out of tragedy and weakness, how to inspire and to encourage, how to criticise, how to lead or to command. The latent forces in men he developed and directed. He was the family doctor of those in trouble and here again his one aim was to so direct that he taught prevention, and he left each situation securer for his guidance.

TRIBUTE BY R. B. OGILVIE

OUR lamented friend, Dr. Henry Baird Favill, was in mind and heart one of those rarely gifted characters who gave to scholarship a broader culture, to philosophy a bolder range, to friendship a firmer faith. He did many things well but nothing so well as he talked. His conversation I have seldom heard equalled. Though remarkably fluent and select it was neither fluency nor choice of diction, nor wit, nor sentiment that gave it its peculiar power, but accuracy of statement, keen discrimination, and a certain weight of judgment that made him the idol of any company. He was everywhere a welcome guest. His arrival was a holiday, and so was his abode with any of his wide circle of admiring friends. He seemed like a king of some parliament of love, who carried the key to all confidences, and to whom every question was finally referred, and yet there was so much of intellectual aim and activity breathed through his alliance as to give dignity to them all. He was indeed the friend. This was his vocation. Into whatever home he entered he brought a benediction of truth, justice, tolerance, and honor. He knew by intuition and experience how to interpret the inner life of every man or woman, and through his interpretation he could sooth and strengthen. Such was the man, the friend, the citizen we fondly loved in life, and whose untimely death we so much deplore.

TRIBUTE BY F. E. BOLLING

THE Japanese have a saying that it is better to be a crystal and be broken than to remain like a tile upon a housetop. Here and there in the world we come upon lives that have somewhat of the crystalline in them—letting through their transparence some rays of light into our dimmer comprehensions, making less blurred our muddled vision. When those lives end it is our dreary human way to say and to feel that the crystal is broken.

All those who knew Dr. Favill cry out at his untimely death, as at the breaking of the crystal, the crystal through which alone, to so many, the light of life was clearly visible.

Dr. Favill walked among men with power and gentleness, a king in the first democratic sense of the word, a leader among his kin, the father of his folk, and his folkship was of the world. His leadership was founded upon his capacity for being more truly, more roundly a man than the men among whom he lived.

His kingship was maintained in his towering superiority and his all inclusive equality. In him, humanity was intensified into a many gifted perfection of service. He was a physician, a leader, ever wise in instinct and learning. He was a teacher, a seer, untiring in tolerance and faith. He was a citizen endlessly patient, pouring enormous resources of vision and hope and aid into the abysses of sorrow. But physician, teacher, citizen, his manifold capacities were indivisibly blended in his humanity. First and foremost he was a man among men.

In the glare and confusion of a confused world, in the accumulation of duties which he heaped upon himself, his eyes were always clear. He instantaneously sorted the true from the false; his mind unaware of processes, grasped facts and duly ordered them, as swiftly as life set them before him.

He loved right and hated wrong, not with effort, not

puritanically, not conventionally, but with glad freedom. He was right, just as his splendid body was straight and swift and free. His was the ecstatic freedom of control. He knew neither lassitude nor frailty.

The past he carried with him in his heart for its treasure of experience and happiness. But unfruitful regret, fear of yesterday, to-day or to-morrow, all impotence, none of these ever dimmed his radiant courage or hindered for even a moment his royal strength, gentleness, patience, infinite pity; of these his vision was compounded. He read his own soul without error, and reflected in that soul were the myriads of those who sought solace of his strength. Unflinching he read their manifold meanings, fusing in the concentrated fire of his love, a multitude of warring elements. For himself and for every life he touched he moulded achievement out of pain and wisdom out of despair.

Now that he is gone away, ahead of those whom he always led, out into the reaches that men call death, life has become less actual, for the many who were his people. But so intense a personality cannot be dimmed. Death containing him becomes less secret. Of the many meanings embodied in such a life, surely the greatest must be that a crystal cannot be shattered; that in a world of fearsome phantoms nothing, not even the last terror of death, can diminish the reality of such courageous and true manhood.

TRIBUTE BY E. L. FOLEY

"It is easy in the world to live after the world's opinion; it is easy in solitude to live after our own; but the great man is he who in the midst of the crowd keeps with perfect sweetness the independence of solitude."

EMERSON has described Dr. Favill more fittingly than the writer of this brief sketch possibly can. A graduate of the University of Wisconsin and of Rush Medical College, Dr. Favill began his medical practice in

Chicago in 1894. For more than twenty years he was, in every sense of the term, a leading citizen. Sane, vigorous, essentially just, fundamentally scientific in his searching analysis of conditions, whether pathological, civic, or personal, he was a tower of strength to all those fortunate enough to know him or to work with him.

A senior pupil nurse at St. Luke's Hospital, who had just finished his course of lectures, once said of Dr. Favill: "It is not always what he says, but what he makes you think out for yourself that makes Dr. Favill's class so interesting." This was true of Dr. Favill to a remarkable degree. All men and women—civic workers, professional workers, and others who consulted him, carried their problems and perplexities to him, not because he had a panacea for every ill, but because his genuine interest, his keen searching questions, and his ability to make even vague thinkers crystallize their own thoughts, suddenly clarified the difficulty of the person seeking advice and enabled her to put her own mental house in order. Dr. Favill was never too busy to give this sort of help. He seldom spoke dogmatically; he frequently advised patience; but he never sent one away dissatisfied or ill at ease.

The various offices which he held at one time or another—president of the Chicago Municipal Voters' League, of the City Club, of the Chicago Tuberculosis Institute, of the Chicago Medical Society, a council chairman of the American Medical Association, director of the American Association for Labor Legislation, etc.—testify to the esteem in which he was held as a physician and a citizen. The genuine and widespread grief felt at his death showed that his friends thought first of Dr. Favill and his friendship, and of these other honors later.

As nurses we owe very much to Dr. Favill. For years he gave his best to many of us. As president of the Staff of St. Luke's Hospital and in his connection with other hospitals in the city, he was always interested in nursing

problems; his constant, unswerving support of high standards of the service which he felt we not only owed but desired to give every patient who came to us, was a constant inspiration and stimulation to every nurse who worked for him.

Two addresses, one given at our National Meeting in San Francisco and published in the January *Journal of Nursing*, the other published in the *Pennsylvania Medical Journal* (November, 1915), entitled "The Public and the Medical Profession—A Square Deal," will enable us all to realize the influence such a friend must have had on the members of the medical and nursing profession alike. To continue the work believing that we still have his support and encouragement and interest is the finest tribute which we, as nurses, can pay the memory of Dr. Favill.

TRIBUTE BY J. C. WILLIAMS

IT is still difficult to speak of this man as one who has been but no longer is, so definite was the impression left by his unique personality. It is equally difficult to give an understanding of his character—for more than any other of his time he was all things to all people and, except in the sense of being of universal service, his relation to each was quite different in internal as well as external aspect. His response was always entirely genuine for he had an unlimited human sympathy. He realized as no one else could our restrictions and limitations, and accepted them quite simply, in an entirely uncritical attitude. That was his keynote,—the uncritical attitude,—for criticism is seldom friendly,—it is destructive, not creative. His gift was constructive and led him toward building up—not tearing down.

He had, in the broadest sense, a fine scientific and analytical mind, but the element in his professional success, exceeding his medical skill, was his understanding of

people. In this particular line I believe he was never surpassed—if indeed ever equalled. The impersonal attitude of the scientist was impossible to him. Symptoms and medical details of an average case, based on painful trifles, bored him terribly. The outward expression of inward discontent or depression among well-fed and well-housed people was extremely irksome. But the situation itself, if not the individual, and each person's reaction to his or her particular problem, was always of interest.

His greatest endowment was the gift of analysis and it enabled him to approach the most delicate problem without creating an atmosphere of strain or intrusion. I have often heard him say, "I am not quite sure of the psychology of this situation," but the struggle was half won by recognizing that a psychologic as well as physiologic aspect did exist. Much as it is needed, I have not found such insight usual in his profession. And the fact that this analytical instinct was entirely uncritical is far more significant of the man. His judgments were based on the spirit rather than the act. Action, he felt, was often involuntary and impulsive through the pressure of unsympathetic environment, and by looking more deeply into the human heart he accepted results and tolerated issues from the viewpoint of spiritual effort.

For women, especially, whether weak physically, mentally, or morally, he had the vastest sympathy, and it is difficult to realize that any man could so thoroughly understand women. He was born—not made—a physician, and in real suffering, whether physical or mental, his touch was the gentlest, and his diagnosis keen, shrewd, and accurate.

He had his moments of intense introspection and at such times felt himself a failure because life had not given the things he thought he valued most. He was always a driven, restless, overburdened creature, and it is doubtful if the things he thought could mean so much would ever

have contented or held him. He often said that, while the world spoke of him as a success, only he himself knew how he had failed. He was the loneliest creature living. I have heard that "He is strongest who stands most alone," so perhaps this was one of the great elements of his strength.

He literally could forgive all things. Average standards of right and wrong, morality or immorality, interested him very little except as a public commodity. He had a strong civic conscience—a keen sense of community good or evil. But in the personal case it was his feeling that average judgments interfered with liberty—always sacred to him. "Morality or immorality is chiefly a question of giving pain. One must not do that unnecessarily," he said. He was entirely fearless and followed his judgments regardless of consequences. He thought, indeed, that he was indifferent to consequences. In this I never agreed. I always felt he was extremely sensitive to criticism and inwardly hurt by much that was unfair and unjust. His standards were not the standards of other people—his code was his own, and by some he might even have been called lawless. He was right thinking and right minded, although entirely unconventional as to accepted forms. Everything vital, natural, or elemental was sacred to him, regardless of its social or legal aspect, and he allowed others as great liberty of thought or action as he himself demanded. Indeed, if he worshipped any god, it was personal liberty. But though he never forced his beliefs on others, detesting any such control, still without wish or effort he probably dominated more lives than any individual of his time. With blind faith his lead was followed, and, because that lead was sane and wise, harm never came of it. "Life is not a question of achievement but of vision," he wrote to me long ago.

Intellectually he was the strongest man I have ever known, and his memory was as amazing as his mind. He told me once that as he seldom found time to re-read the

things he liked, he memorized them at once, and so his storehouse of precious words was always with him. He could literally recite volumes. His taste in literature and music was unique. Style counted for nothing — only things that touched human chords had any meaning. He was easily stirred emotionally, often extremely irritable, and he had a quick dramatic instinct. However, his sense of the humorous was so dominant that he could relapse into it at once from the tensest moment. His wit, indeed, was of a subtle, brilliant, and very rare type.

He accepted everyone's cares and burdens so cheerfully that almost no one realized his consuming fatigue the last years of his life. He had formed a habit of considering every moment not overcrowded with activities, as time wasted.

If you can force your heart and nerve and sinew
To serve your turn long after they are gone,
And so hold on when there is nothing in you
Except the Will which says to them: "Hold on."

He really did this thing, but his magnificent physique gave no outward sign. There must have been years in the past when life for him was a splendid adventure, but that time had gone forever. One cannot believe he went willingly when death came, but at least he was always ready, though not in the dogmatic sense. If he felt it near there must have been a grim sort of tragedy in those last hours — a quizzical questioning attitude that was neither horror nor fear, but rather a solemn acceptance of Fate's final fling at him. He could have had no regrets, for what he had done, he had done, accepted the price cheerfully, and put it all out of his mind forever. But he died as he had lived — unbroken and untamed.

Out of the night that covers me
Black as the pit from Pole to Pole,

I thank whatever gods may be
For my unconquerable soul.

In the fell clutch of circumstance
I have not winced nor cried aloud;
Under the bludgeonings of chance
My head is bloody, *but unbowed.*

Beyond this place of wrath and tears
Looms but the horror of the shade
And yet the menace of the years
Finds, and shall find me, unafraid.

It matters not how straight the gate,
How charged with punishments the scroll,
I am the Master of my Fate,
I am the Captain of my soul.

His simplicity was almost aggressive, and I never could think of him in rhetoric—"That noble man, this imperial figure,"—but rather as this intensely human brother who had stood among us, leaving the memory of faults as generous and as lovable as his virtues; this big, strong man who accepted life so passionately in every form presented, without revenge, remorse, or repinings, and who feared it neither at its best nor at its worst.

In a recent letter I find, "Don't be discouraged. Life is all ahead of you and large in possibilities. The future one cannot see in outline—but in principle one can—and I could not be so complacent in seeing my boy marching into a life of hilliest possibilities, if I did not know that there is a bigness that can overshadow and overcome them." Later,—“I am glad of a respite—to be out of the turmoil for a few breaths.” But it was only a few breaths he wanted—not eternity. Still eternity is his, and deep in that now quiet heart rests this last great secret. In fifty-five hurried, harrassed years his threescore years and ten

were fully lived,—“for living,” he always said, “means serving.”

One does not see him led by the church before the tribunal of a forgiving Diety—but rather re-absorbed by great Nature herself. This was his first love and his last. Few have ever felt the earth and its forces as he felt them. I think of him always surrounded by the elements—facing with savage joy the wildest winds, or resting in the peace of quiet, star-lit woods. These things I quote in full measure because he loved them so:

Do you fear the force of the wind,
 The slash of the rain?
 Go face it, and fight it;
 Be savage again.
 Go hungry and cold like the wolf;
 Go wade like the crane.
 The palm of your hand will thicken;
 The skin of your cheek will tan.
 You'll grow ragged and weary and swarthy,
 But you'll walk like a man.

Waken, Drink of thy first mother's life, a balsam for every ill, mother's milk that shall unpoison thy blood, and bring the thick, black drops to naught. Child of the weather and all outdoors, latest child of mine, draw from me will, and might, and the love of the undefiled, acquaintance with the rune that shall destroy the venom that taints you, shall blast the wrong done you! Draw large, free draughts! Return to me, thou man-child! I give thee the strength of my forests, my rivers, my sea, my sunshine, my starshine, my own right arm, my heart! I cleanse thee. The slime of the long years shall not cling to thee. I start thee afresh, new-born. By night in my star-hung tent the gods shall visit thee, by day thou shalt walk in the way of becoming a god thyself. I give thee scorn for the ignoble, trust in thy fellow, dependence on thine own lusty sinew and unconquerable will,—familiar friend of hardship and content, spare and pure and strong,—joy in the earth, the sun, the wind, faith in the

unseen. This is thy birthright. Whatever else the years may bring, see that thou do it no wrong. I, the unpolluted, strong wild strain in thy blood, the vital savage, save thee from thyself. Sleep, now, sweet hope. The winds sing to thee, the waves lull thee, the stars affright thee not! Dear son of thy mother, sleep!

There were many burdened hearts to cry, "They have taken my Lord from me and I know not where they have laid him,"—but Nature could answer each, "I have but taken my own. From my breast I have lifted him and in my heart I have laid him." Humbly and reverently let us petition whatever gods there be that peace such as this is his, at last.

As monumental bronze, unchanged his look;
A soul that pity touched, but never shook;
Trained from his tree-rocked cradle to his bier,
The fierce extremes of good and ill to brook
Impassive—fearing but the shame of fear—
A stoic of the woods—a man without a tear.

(A Few Months Later)

In looking now at the tragic incompleteness of his life, it assumes a different aspect. My memories at first seemed made of pain—a throbbing, consuming, living pain for him—for all the things he had not had, and had not been. Unconsciously I had pictured for him, toward the end of time, a story-book sort of peace and poise; a complacent composure. Such a hope was futile and quite unintelligent. Now, at last, I see it all differently. The pain is there, deeper, but it is a personal thing and applies to those of us who feel unable still to meet the days without him. I know now that there could have been no rest for him, ever. At last I can see that because of the influence left by his life, it matters very little what his personal reaction to the circumstances in that life happened to be. A great man has stood among us—touched us—definitely influenced us—

left his mark upon us. Tempestuous and tormented, vulnerable and faulty, but beyond all, human, he too might have said out of the agony of untold struggles: (I quote) "It is a struggle worthy of fine souls to tell the truth—but it is a far greater struggle to know what the truth is. It is that struggle, being the only precious thing I have, that I bequeath to you. There is nothing more I can say, save to wish you well." The thing we call happiness is for very few. It comes to none who think deeply in any positive form. It was not meant for him at all. Only a broken spirit can compromise with essentials and he faced both his own problems and those of other people unflinchingly. All could feel his bigness while few understood it, because he deliberately cast about himself an illusion that was not easy to penetrate. He was armed with a subtle sort of bluff. There was no insincerity in this. Through deep-rooted characteristics that may have been racial it was actually necessary, in him, to self-preservation. It developed chiefly, I think, through his dread of the penetrating sort of curiosity that he feared might sometime uncover in him such weaknesses as were constantly being uncovered, for his scrutiny, by others. With the rarest delicacy, he could meet and treat, even to the healing point, many of these mental sores. It revolted him, however, to think that in even the gentlest way others might intrude upon the precious privacy of his reserve. This wall of stern control became so habitually his refuge that it was in the end a definite self-deception. But beneath and beyond it his life will stand forever as a passionate protest against every form of sham. As for his death—well—a great scientist wrote over the grave of one who had blazed that path ahead, even as in life he had blazed all others, "We have loved the stars too well to fear the night."

FORMAL RESOLUTIONS

RESOLUTIONS OF THE CITY CLUB OF CHICAGO

FEBRUARY 21, 1916

WHEREAS, Death has taken Henry Baird Favill, who was a charter member of this Club, was continuously a member of its Board of Directors from 1906 until his death on February 20, 1916, and was its President during the years 1910-11 and 1911-12; and

Whereas, As a physician he was not only skillful in the treatment of disease, but studied and emphasized means of prevention of disease and assiduously worked for the adoption of safeguards to the public—such as proper sanitation, the inspection of milk and foods, and the wise regulation of the practice of medicine, so that not only the health of individuals, but pre-eminently, the health of the community was the constant object of his efforts; and

Whereas, As a citizen he unsparingly gave his thoughts and energy to movements for the improvement of civic and social conditions, bringing into play with great effectiveness the same incisive analysis of conditions, the same ability to pierce beneath surface symptoms to underlying causes that marked his diagnosis as a physician, so that his life was an inspiring example of high public service; and

Whereas, He has always been a loyal member of this Club and his wise direction as President amid the many difficult questions of policy which arose during the period when the Club moved into its present building was of inestimable value, and since that time his thoughtful counsel as director has been most helpful; and

Whereas, Beyond all that he has accomplished, great as it was, his personality as a man—frank, companionable, kindly,—won for him affection of all the members of the Club and led them to prize his hopefulness of view, his sympathy and his largeness of heart and his innate democracy; now, therefore, be it

Resolved, By the Directors of the City Club of Chicago, that in behalf of its members they record their deep sense of loss in the death of Dr. Favill and that they express their heartfelt sympathy for his family; and be it further

Resolved, That a copy of these resolutions be sent to his wife and son.

RESOLUTIONS OF THE UNIVERSITY OF WISCONSIN CLUB OF CHICAGO

Resolved, That the University of Wisconsin Club of Chicago has heard with profound sorrow of the death of Henry B. Favill, one of its most distinguished members.

He was respected by all who knew him, for his lofty ideals, his elevation of soul, and for his great learning, which by much reflection had ripened into wisdom. He was a constant inspiration to the young and an example to them of what a good citizen should be. Professionally busy, he was never too busy to lend a helping hand to any enterprise which promised uplift to his fellows or to the community of which he was a part. Our loss is great but that of his immediate family is much greater.

Resolved, Further, That we extend our profound sympathy to the members of his family, and that a copy of these resolutions be sent to them.

A. E. VAN HAGAN,
President.

RESOLUTIONS OF THE MEDICAL BOARD OF
ST. LUKE'S HOSPITAL

MARCH 21, 1916

Whereas, The members of the Medical Board of St. Luke's Hospital realize an irreparable loss in the untimely death of their beloved President, Henry Baird Favill; and

Whereas, They are overwhelmed with sorrow;

Resolved, That they individually and as a body put on record their appreciation of one who, in a manner unique in his time and age, stood for rectitude, courage, simplicity and noble manhood, and who gave moral tone to every community in which he lived;

Resolved, That a copy of these resolutions, with their deep sympathy, be sent to the Family of their dear friend.

(Committee) ARCHIBALD CHURCH
WILLIAM ALLEN PUSEY
FRANK CARY

RESOLUTIONS OF THE BOARD OF TRUSTEES
OF ST. LUKE'S HOSPITAL

JUNE 4, 1916

Whereas, It has pleased Almighty God to take unto Himself our friend and fellow-laborer, Henry Baird Favill, at a time when in our expectation, many years of the useful service which has made him beloved and honored in this community still lay before him, thereby reminding us that, "There's a divinity that shapes our ends, rough-hew them how we will";

Be It Resolved, That we, the Trustees of St. Luke's Hospital, place on record our appreciation of his life, character and death.

Rich in knowledge and experience, abounding in vigor and sympathy, Dr. Favill, though called away in the full flower of life, had made a name for himself which will be remembered in Chicago for many years to come. His activities extended far beyond his profession, in which he attained an eminence reached only by men of the greatest skill, wisdom and perseverance. He was alert to all that had a bearing on human interests and public welfare; indeed, considering his laborious and absorbing work as a physician, it is surprising that he should have accomplished so much in social and civic enterprises. He was a tower of strength for all who appealed to him; a man of vision and high ideals, broad-minded and patient, gentle and considerate, and, to those who sought him, ever a wise counselor and faithful friend. The world is the better for his having been in it. We recognize his generous and efficient service in St. Luke's Hospital; and in behalf of the Hospital we acknowledge its loss in his death, and its gratitude for his great usefulness and deep interest in all its activities.

RESOLUTIONS OF THE CHICAGO SOCIETY OF INTERNAL MEDICINE

Whereas, On February 20, 1916, death removed Dr. Henry B. Favill from the rolls of the Society of Internal Medicine; and

Whereas, Dr. Favill was one of the most highly esteemed members of this Society, a wise and skillful physician, beloved as a man and admired as a citizen; therefore be it

Resolved, That with the other physicians and laymen of Chicago, we mourn the loss of this great and good man, and extend to the bereaved wife and son our profound sympathy; and in token thereof be it further

Resolved, That the resolutions be spread upon the records of the Society of Internal Medicine, and a copy thereof be conveyed to Dr. Favill's family.

HUGH T. PATRICK
CHARLES SPENCER WILLIAMSON
EUGENE S. TALBOT, JR.

RESOLUTIONS OF THE CHICAGO NEUROLOGICAL SOCIETY

Whereas, On February 20, 1916, Dr. Henry Baird Favill departed this life; and

Whereas, For many years he had been a beloved and admired member of the Chicago Neurological Society; and

Whereas, Dr. Favill was not only a physician of great skill and unusual scientific attainments, loyal alike to his patients and his ideals, great in his kindness as in his strength, but also a man of marvelously manifold and wonderfully effective activities in the broad sphere of humanitarianism; therefore, be it

Resolved, That in the passing away of Dr. Favill the Chicago Neurological Society, the medical profession, the City of Chicago, and the people of the United States have suffered a great loss, but that we are bigger and better for his having lived and labored; and be it

Resolved, That we extend to his bereaved family our profound sympathy, that these resolutions be spread upon our records, and a copy thereof sent to the family of our late associate, and to the Journal of Nervous and Mental Disease.

(Committee) HUGH T. PATRICK, *Chairman*
LEWIS J. POLLOCK
SIGMUND KRUMHOLZ

RESOLUTIONS OF THE SENIOR CLASS OF
RUSH MEDICAL COLLEGE

Whereas, Almighty God in his infinite goodness and mercy has called from this world our beloved friend and teacher; and

Whereas, We feel deeply the loss of our departed teacher;

Be It Resolved, That we, the members of the Senior Class of Rush Medical College, express herein our deep grief; and

Be It Further Resolved, That, as members of the Senior Class of Rush Medical College, we extend to his family our most sincere and heartfelt sympathy in their recent sorrow; and

Be It Further Resolved, That these resolutions be recorded in the minutes and that a copy be sent to his family.

For the Class of '16: FRANCIS E. TURGASEN
 RALPH W. CARPENTER

RESOLUTIONS OF THE NORTH SIDE BRANCH
OF THE CHICAGO MEDICAL SOCIETY

Whereas, A Great Physician, a devoted worker for progress, a splendid example of noble, unselfish, productive idealism, and a staunch friend of our profession, has been taken from us;

Whereas, He stood for all that is elevating and fine in our profession, giving in a large measure of his time and his remarkable energy and thought to the betterment of his professional brethren and to the community at large; and

Whereas, This society has sustained a loss in the death

of Henry B. Favill impossible to replace; now, therefore, be it

Resolved, That the Secretary of the Association be instructed to spread on the minutes this memorial of our inconsolable grief and regret, and that he be directed to send to the bereaved family a copy of this resolution as an expression of our sympathy and of our love for a man who measured so large in the world in everything that makes for manhood and good citizenship.

(Committee) ALBERT J. OCHSNER
F. A. JEFFERSON

RESOLUTIONS OF THE NORTHWESTERN UNIVERSITY SETTLEMENT

MARCH 17, 1916

Whereas, Doctor Henry Baird Favill, a member of the Advisory Council of Northwestern University Settlement, has been suddenly called by death; and

Whereas, Northwestern University Settlement felt rich in the possession of his sympathy and interest, and his membership on the Advisory Council; therefore

Be It Resolved, That the members of the Council of Northwestern University Settlement feel that the Settlement shares with every other organization with which Doctor Favill was connected, a deep and irreparable loss; and

Be It Further Resolved, That a copy of these resolutions be spread upon the Minutes of this Meeting and that a copy be sent to Doctor Favill's family.

RESOLUTIONS OF THE AMERICAN NURSES' ASSOCIATION

Whereas, The American Nurses' Association feels a sense of real loss in the death of Dr. Henry Baird Favill of Chicago;

Be It Resolved, That this Association express its sincere appreciation of his unfailing sympathy and ready assistance in all nursing problems and his personal service in behalf of many women of our profession.

The National League of Nursing Education and The National Organization for Public Health Nursing unite with the American Nurses' Association in this resolution.

RESOLUTIONS OF THE NATIONAL COMMITTEE FOR MENTAL HYGIENE

Whereas, Dr. Henry Baird Favill, who died in Springfield, Massachusetts, February 20, 1916, was one of the founders and first President of the National Committee for Mental Hygiene, and a member of the Finance Committee until his death, and

Whereas, From the beginning, he was of inestimable value to the Committee because of his professional knowledge and sympathy; his power of initiative; his just vision; his extraordinary personal magnetism which inspired others with his own enthusiasm; and his unswerving directness in working out, one by one, the necessary steps for the advancement of its plans; and

Whereas, His power and nobility of character will be, it is hoped, an inspiration to his successors and a dominant force as long as it exists;

Therefore, Be It Resolved, by the National Committee for Mental Hygiene, in convention assembled, in the City of New York, State of New York, this Seventh day of February, 1917, that this body deeply mourns the too early death of this great physician, big-hearted man, and devoted servant of humanity, while it rejoices in his example and influence.

Be It Resolved, That a copy of this resolution be sent to his family and that it shall be entered in the minutes of this meeting.

LETTERS FROM ORGANIZATIONS

LAKE MILLS, WISCONSIN, NEIGHBORS

FEELING that Dr. Favill has helped us as a neighborhood and as individuals, we wish to express to you our appreciation of him, and our sympathy in this great loss which has come to us all.

He helped us to work together and to work for the best. He was interested in each one of us.

His influence will go on and the neighborhood will always be better for the little time he has given us.

S. W. FAVILL

W. F. STILES

C. M. BEVERIDGE

BENJ. F. BERG

J. O. JOHNSTON

H. W. FAVILLE

BEN W. CRUMP

GEORGE P. WHITE

JESSE W. CRUMP

THE CENTRAL ILLINOIS CREAMERY MEN'S CLUB

It was with great regret that we received the news of the death of Dr. Henry B. Favill. As dairymen we feel that we have lost a tireless champion of our cause. His manifold interests, of which the dairy industry was one, have made him invaluable to the Society, and in his passing we have sustained the loss of a true friend.

The Central Illinois Creamery Men's Club, assembled in Bloomington, March 2d, wish to express their deepest sympathy to the family of Dr. Favill, and to take this opportunity to acknowledge their appreciation of his work, character, and life.

F. A. JORGENSEN,

CHAMPAIGN, ILL.

Secretary.

THE BUSINESS MEN'S DAIRY EXTENSION
MOVEMENT OF ILLINOIS

MRS. HENRY B. FAVILL:

Dear Madam:

The undersigned has been directed by the Board of Directors of the Business Men's Dairy Extension Movement of Illinois to convey to you our appreciation of the late Dr. Favill. As a co-worker he was endeared to us, and we feel keenly the great loss we have all been called upon to accept.

Please permit us to extend to you the deep appreciation we feel for having been permitted to come in contact with so noble and so inspiring a character.

Assuring you of our deepest sympathy in your bereavement, in which we all join, I beg to remain

Yours sincerely,

EDWARD K. SLATER.

CHICAGO, February 29, 1916.

EASTERN STATES AGRICULTURAL AND
INDUSTRIAL EXPOSITION

MRS. H. B. FAVILL:

My dear Mrs. Favill:

When the sad news of the Doctor's death reached Springfield it was a cause of public mourning among the three hundred and fifty business men, who have known of his public-spirited work for the betterment of agriculture.

We were very greatly disappointed in not having the privilege of hearing his words of advice and encouragement at the Great New England Banquet on the evening of the

14th. Mr. Pratt told us of the Doctor's illness, and his absence was keenly felt.

While we realize in a way what the death of Dr. Favill means to his own family, we know that it is also a very great public loss. Men who think in large units and who dedicate much of their thought and substance to the public good are all too few in number. The City of Springfield was looking forward to a closer acquaintance with him.

At a meeting attended by nearly four hundred men yesterday, a resolution of condolence was passed, and I was directed to convey to you something of the appreciation that Springfield men entertain for the memory of Dr. Favill, and extend to his family their most sincere sympathy.

Very truly yours, JOSHUA L. BROOKS,
President.

SPRINGFIELD, MASS., February 22, 1916.

INSTITUTE OF MEDICINE

MRS. HENRY BAIRD FAVILL:

My dear Mrs. Favill:

As a committee appointed by the Governors of the Institute of Medicine for this special purpose, we desire to convey to you and to your son the deep sympathy felt by the Institute in the loss of your husband.

We desire, further, to join in the expressions of praise that are heard on all sides for his industry, skill, and high standing as a physician, his worth as a man and friend, his lofty conception and efficient performance of civic duty.

He honored us by becoming one of our charter members. We shall have spread upon our records a sketch of his life showing his many activities, his numerous services to medicine, his self-sacrificing efforts to uplift the standards and practices of civic life. We deplore the loss of a member to whom we had confidently looked forward for wise counsel

and inspiring participation in the working out of the principles of the Institute.

Very sincerely,

N. S. DAVIS

WM. ALLEN PUSEY

JAMES B. HERRICK

CHICAGO, June 5, 1916.

ALUMNÆ ASSOCIATION
ST. LUKE'S HOSPITAL TRAINING SCHOOL
CHICAGO

DEAR MRS. FAVILL:

Perhaps you alone can realize what we the graduates of St. Luke's have lost with the falling asleep of that great soul, so dear to us all. Each and every one of us shares with you a deep personal grief, too real for either spoken or written words, but please accept our love.

Most sincerely yours,

EVA A. MACK,

Secretary.

March 1, 1916.

THE VISITING NURSE ASSOCIATION
OF CHICAGO

MY DEAR MRS. FAVILL:

The members of the Board of Directors of the Visiting Nurse Association desire to express to you and your son their deepest sympathy.

For many years the Association had had the rare privilege of holding Dr. Favill as its most valued counselor and friend. His sympathy and understanding never failed; his broad, wise, temperate counsel helped at all times of difficulty.

To the supervisors and elder nurses who knew and loved him he was a tower of strength, and especially was this true with Miss Foley, who constantly appealed to him for advice.

Out of our great love and reverence for him and deep sense of devotion has come the desire to set our standards even higher and strive for those ideals of citizenship which were so preëminently his, showing in our work more of the devotion and self-sacrifice which made his life a splendid gift and a glorious memory.

Yours faithfully,

JOSEPHINE R. PAYSON,
Corresponding Secretary.

March 4, 1916.

THE THREE ARTS CLUB
CHICAGO

MY DEAR MRS. FAVILL:

The Board of Managers of the Three Arts Club wish me to express to you their sincerest sympathy in your great sorrow.

We feel we have lost a valuable friend, counselor, and adviser with the passing away of Dr. Favill. Always willing to aid and give untiringly of his services to do good unto others, Dr. Favill was a friend indeed to the Three Arts Club. That one so needed by his fellow men, so helpful and thoughtful of the comforts of others, should be called so suddenly can't be explained. We only know that many mourn with you in your sorrow. Believe me,

Sincerely yours,

GRACE DIXON,
Recording Secretary.

March 4, 1916.

THE ILLINOIS SOCIETY OF
THE COLONIAL DAMES OF AMERICA

MY DEAR MRS. FAVILL:

The President, the members of the Board, and each member of the Society, are thinking of you with sorrowing hearts in these days of your great grief.

Everyone is grieving with you and your son, for your husband stood for all that was fine and noble; and his valued assistance in so many branches of usefulness makes his loss an irreparable one to the city, as well as to those who knew him intimately.

To you and to your son upon whom this great sorrow falls most heavily, the members of the Illinois Society of Colonial Dames send their deepest sympathy.

Cordially yours,

KATHARINE BAYLEY,
Corresponding Secretary.

February 28, 1916.

ASSOCIATED JEWISH CHARITIES

In memory of the dear departed, a contribution to the Memorial Flower Fund has been made by Mr. and Mrs. Julius Rosenwald, 4901 Ellis Avenue.

The name of the loved one thus remembered will be included in the Memorial Flower Fund List in the next report of the Associated Jewish Charities of Chicago.

JULIUS ROSENWALD,
President.

PRESS COMMENT

Chicago Tribune, February 22, 1916. Editorial.

DR. FAVILL

A MAN who leads in his own profession is accounted a success. Usually men are not big enough for one profession. Dr. Henry B. Favill, who died in Springfield, Mass., on Sunday, was bigger than his profession. He succeeded in relating his profession intimately to life, and he had enough energy to do work outside of his profession.

Quite characteristically, he died in the performance of one of these extra-professional duties. He went to Springfield to address the New England Dairy Association. Dr. Favill knew from his profession the dangers of impure milk. He did not merely warn against milk. He established a model farm in Wisconsin and attempted to work out practical means for avoiding impure milk.

It was the same in politics. Dr. Favill was not content to see and understand the dangers of impure politics in Chicago. He went out and worked against them. For three years he was president of the Municipal Voters' League.

Chicago can get along without men like Dr. Favill. But it cannot get ahead without them.

Chicago Herald, February 22, 1916. Editorial.

A GOOD CITIZEN PASSES

IN the death of Henry Baird Favill Chicago has suffered a heavy loss. Dr. Favill was a modern representative of the old-fashioned doctor, "guide, philosopher and friend."

But greater than the personal bereavement is the loss which has come to the entire community. For Henry Baird Favill was also the citizen ever loyal to the public welfare. By birth and professional attainments his lot was cast with the prosperous. He might easily have been blinded by his great success. He might have been merely the eminent physician, the friend of the great.

He chose a higher place. No class was big enough for him. His interest and his service belonged to all groups. The mere recital of the agencies and organizations which he touched indicates something of the generosity of his outlook. He was a pioneer in public health betterment, in civic reform and in social readjustment. He was a fore-runner in the creation of the new conscience.

But the things he did were the bare shell of the man. Larger than any of his activities was the unselfish spirit which animated them all. He was an interpreter. The rich and the powerful were better able to sympathize with the urgencies and the demands of other classes because so many believed "what Dr. Favill says is right." Chicago has in truth lost a man whose presence can ill be spared. Citizens of his temper, of his zeal for the common good, are all too few in any place and any time.

Chicago Evening Post, February 22, 1916. Editorial.

DR. HENRY B. FAVILL

DR. HENRY B. FAVILL was a man who held in a city of over 2,000,000 inhabitants the position of love, dignity and influence held by many a lesser-known "country doctor" in the villages of America.

That was the thing that made his life unique.

Dr. Favill as a physician stood among the very few very best in the country. His profession will miss his leadership. Households and hospitals today will hardly

know where to turn in order to fill the gap left by his death.

He had not only the keenest technical ability but the finest qualities of character. That straight, angular figure, without overcoat even in the coldest weather, brought physical confidence to the bedside of the weakest invalid. There was something psychologically compelling in Dr. Favill's sturdy pride in the strain of native Indian blood that ran through his veins. It made him, perhaps, even more of the crisp out-of-doors man that is so welcome a presence in the sick chamber.

Dr. Favill's life would have been completed in service had he contained it within these limits. But, like those faithful, hard-working "country doctors," he gave of his power and ability to the common welfare of his city. He served as president of the Municipal Voters' League from 1907 to 1910, during the period when it was finally establishing the standing on which it rests today, secure against all efforts to undermine public confidence in it. He was president of the City Club. No sound effort of honesty and solid advance in government ever found him unwilling to take his share in it.

Dr. Favill's life thread will be found running through the fabric of his city's history for the last two decades. It has brightened it and strengthened it. Dr. Favill's sudden death, in the full swing of his splendid activity, leaves Chicago with more than the customary sense of a deep public loss.

Chicago Tribune, February 26, 1916. Correspondence.

"AND THE GREATEST OF THESE IS LOVE"

"**W**HO shall take his place? What shall we do without him?" came from many lips on Tuesday morning at the Fourth Presbyterian church when hundreds of sorrowing people, young and old, rich and

poor, were gathered to pay their last respects to Dr. Henry Baird Favill. It was his great happiness to do for others. He had a firm belief in the good of each one of us and he knew and taught that "inner peace that can only come from within." So it was to the spiritual as well as the physical ills that he ministered, leading each one to some moral victory.

He was a man of many sides and his delightful wit and bouyancy of spirit were in striking contrast to his deep, meditative moments. He was a giant in stature, as well as in intellect and heart, and his courage and strength were combined with the tact and intuition of a woman. He had great adaptability and fitted easily into any environment, for he understood the minds and the hearts of men.

As a medical man he advised the use of little medicine, had no fads, and was not didactic as to diet ("food is food," he often said). He wanted people to make an ideal of health, to try to be well for health's sake, and not just to avoid being ill.

He advocated work for all and feared the menace of the easy life. He despised all idleness, sham, and ostentation, and deplored all waste and extravagance. While his spontaneous mind admitted of no fixed rules, his enormous capacity for work was made practicable because of the perfect system of his plans. He had none of the usual horror of the thought of old age and spoke of looking forward to the "peace" of that time; but he was snuffed out in his mature prime, in the full vigor of his powers, when he was most needed. It is good to feel that he has found that peace and that he rests from his labors. It is a triumph to die so beloved. Chicago has and will have other great men, but it will never have another Dr. Favill.—G. S. S.

CHICAGO, Feb. 24, 1916.

Chicago Daily News, February 26, 1916. By Graham Taylor.

FROM AN ARTICLE ON THE MUNICIPAL VOTERS' LEAGUE

IN the midst of them one name and form rises higher than the others because this week we have lost him from among us, and his character and achievements stand in the clear. Dr. Henry B. Favill was the fifth president of the Municipal Voters' League, but we now call his name first on the roll. When a new leader was needed it did not seem possible that this most eminent physician, completely preoccupied with his large and lucrative practice, could be persuaded to undertake this public trust. But he did, not only willingly, but glad of the opportunity to serve his fellow citizens.

Why did he do it? What was there in it for him except the work and worry through two hard years and their bitter city election contests? He could do it only by accepting less professional business, only by the loss of much of his income.

He suffered this loss because not only could he not take as much new business, but lost some former patrons on account of the stand he took to protect the city's interest against those who sought private gain at public expense. Worse still, he had to defend himself against an infamous conspiracy to defame him, whereby the enemies of the league sought to discredit its findings against them. Why did he bear and do all this? Chicago is the answer. He loved his town. He cared for his fellow citizens. He had a pride in the city's progress. He felt he owed it something. He wanted to bear his full share of its burdens. He wanted to share a better Chicago. What else could have moved such a man to such service as he rendered our city?

Not only the success of the Municipal Voters' League in getting a better Council, but also the founding of the City

Club to train its 2,300 members in effective citizenship and to influence the policies of the city and the establishment of the Bureau of Public Efficiency to check up and standardize our city's accounts and departmental service—these are the expressions which he himself gave of the motives which moved him.

In shameful contrast stand the sordid perversions of our whole civil service in the interest of party and personal gain, which sink lower in infamy as Dr. Favill's name rises higher on the city's scroll of fame.

Minneapolis Journal, March 5, 1916. Editorial.

CHICAGO AND DR. FAVILL

A MAN died in Chicago the other day who was an ornament to human nature. He had been immensely successful, but his obituaries were not inspired by the respect which the world has for success. They were written by appreciation and by gratitude.

His career was truly remarkable. Dr. Henry Baird Favill, as the *Chicago Evening Post* remarks, performed in a community of more than two million souls the function of the country physician. It may be added that the manner of his performance was as remarkable as the fact that he did perform such a function for the fourth city of the world.

He was one of the foremost physicians in the United States. His worldly material success was very great. But the true distinction of the man, amounting to a genius, was human. It was what he was to a multitude of individuals, who suffered, who were in trouble. His was the care not only of bodies but also of souls. And he failed nobody who sought him, though men and women of every class and estate and sort sought him. He was spiritual supporter to a whole weak brotherhood and sisterhood.

Dr. Favill was a man of science and had no illusions. He knew what the race is, and he had not a trace of

sentimentalism in his composition. But he helped everybody, anybody. And the stuff of his help was the best on earth. Contact with his strength inspired strength, and insincerity was shamed in his stalwart presence. It is an old figure, but that man was a tower.

"The good great man," as the poet Coleridge knew, is the best product of the long evolutionary process. Strong men are not always kind, and kind men are not always wise. But the profit to a community of a life such as this man lived, is inestimable. Chicago peculiarly was favored by his presence. He is dead at fifty-six, and we suppose there has been wider unofficial grief and more poignant sense of loss among individuals of that community than ever there has attended the death of any man.

Chicago Tribune, June 1, 1916.

PLAN DR. FAVILL MEMORIAL

COMMITTEE IS ORGANIZED UNDER THE AUSPICES OF
CITY AND COMMERCIAL CLUBS TO
WORK ON PROJECT

UNDER the auspices of the City Club and the Commercial Club a committee has been organized to establish a memorial to Dr. Henry Baird Favill. The form which the memorial will take has not yet been determined, but it is expected that this will shortly be done, and a fuller statement of the committee's plan will then be made.

The committee will not solicit contributions, but hopes that sums may be received for this purpose amounting in the aggregate to not less than \$250,000.

The members of the committee are Edgar A. Bancroft, Cyrus Bentley, Dr. Frank Billings, Mrs. Emmons Blaine, Dr. E. C. Dudley, Dr. Frank Gunsaulus, E. D. Hulbert, Dr. Harry Pratt Judson, Cyrus H. McCormick, Allen B. Pond and William E. Skinner.

MAGAZINE NOTICES

Manufacturers' News, February 24, 1916.

DEATH OF HENRY B. FAVILL

IN the death of Dr. Henry B. Favill, the community suffered a distinct loss, not only of a physician of exceptional attainments but of the finest type of American citizen. He conceived it his duty to give a large portion of his richly endowed mentality and his time — crowded though he was with the demands of his profession — to civic righteousness and the amelioration of the lot of those whose lives had not been fortunate.

Dr. Favill did excellent service for three years as president of the Municipal Voters' League, as president of the Chicago City Club and as a member of the Public Efficiency Bureau. He was a real reformer. Dr. Favill never departed a hair's breadth from what he considered right and just and in the interest of the greatest number, but his manner was so courteous and sympathetic and diplomatic that he won admiration and friends among those who did not invariably agree with his conclusions instead of the bitter, uncompromising antagonism which is so often aroused by reformers of a narrow type whose capacity for inspiring hatred is greater than their ability to win friendship and respect.

Dr. Favill died last Sunday, at the home of a friend in Springfield, Mass., following a sudden attack of pneumonia, contracted, it is believed, through attending the funerals of John J. Herrick and C. L. Allen, two old friends who had succumbed to the same disease.

Journal of the American Medical Association, February 26, 1916.

HENRY BAIRD FAVILL

DR. Henry B. Favill, whose obituary appears elsewhere in this issue, was an unusual man. As a physician he represented modern scientific medicine, and his practice was large. He took active part in the work of local, state and national societies, and when he discussed scientific medical questions he was listened to as one speaking with authority. However, while his interest in medicine was great and his practice large, his interest in social questions and in public welfare was so extensive as to make his medical work seem almost incidental. As a citizen of Chicago he was intimately identified with those forces which are seeking to bring about purity and efficiency in public works and service. He was one of the moving spirits in the organization of the City Club—an institution which has done much to bring about better conditions in Chicago. He did effective work as chairman, and executive officer, of the Municipal Voters' League of Chicago, which position he occupied for three years. During that time he naturally made many enemies, but in spite of the attacks made on him by ward politicians and others, he emerged from this work with reputation unspotted. He was a man of altruistic ideals, but at the same time was practical: he attacked all problems with a broad conception of humanity and its weaknesses. With absolute unselfishness, he accepted leadership in many movements which he knew would bring on him attacks by those injured. As chairman of the Council on Health and Public Instruction, his advice was regarded as that of a man who looked at the problems not alone from the standpoint of the physician, but also from that of the publicist. As the *Chicago Herald* said, "No class was big enough for him. His interest and his service belonged to all groups. The mere recital of the

agencies and organizations which he touched indicates something of the generosity of his outlook. He was a pioneer in public health betterment, in civic reform and in social readjustment. He was a forerunner in the creation of the new conscience." We need more of the spirit that controlled Dr. Favill in his activities; he stood for the ideal that the responsibilities of citizenship rest more on the medical profession than on any other class.

The Alumnae of St. Luke's, March, 1916. By a Pupil Nurse.

DR. FAVILL

WE may not stand with those who mourn your burial,
The work goes on and duty holds us here.
But in our hearts our tribute we would bear,
And say our last farewell, oh, friend!

The city mourns her loss —
Ten thousand of the suffering and the sick
Remember now your kindness and your care.
By night and day you watched and worked
And gave your very life to lesson others' pain.

But we, the nurses of St. Luke's, more happy in our fate,
Were wont to work with you and know your plan,
And do some little part with you
To make men whole again.

And year by year you watched us as we came and worked
and went,
Our interest at your heart,
You gave us courage, knowledge, strength,
And best of all, your own great kindliness.

Too soon death claimed you from us,
While life was rich and strong and there was much to do
And we hoped for great things from you,
The leader of our Board.

Farewell, oh, rest at last,
And live again in memory,
Loved, trusted and revered,
Our strong and noble friend.

February 21, 1916.

Harvester World, March, 1916.

WE LOSE A FRIEND

DR. Henry Baird Favill, who addressed the last public dinner of the Harvester Club, died after a short illness at Springfield, Massachusetts, Sunday, February 20th. Literally, he died a martyr to his devotion to duty.

We are proud to think of Dr. Favill as a typical western man. Born in Wisconsin fifty-seven years ago, educated at the State University at Madison, taking his medical degree here at Rush Medical College, he became the leading general practitioner of medicine in this city, with a fame extending over the whole country. The man who enters the medical profession as a general practitioner abandons thoughts of personal comfort. He goes at all hours, in all weathers, to all classes. And this was Dr. Favill. His stalwart physical frame was dominated by his splendid mind. In every attitude and attribute he gave evidence of power; and it was power fitly used for the good of his fellowmen. Many hours taken from his busy professional life were spent in efforts to correct the shortcomings or worse of government and political conditions. His great force of character, his independence of judgment, courage of conviction, his noble disinterestedness, his tender-hearted sympathy, were freely given to his friends and the community. No man was too humble, and none too mighty for his service.

Taken in the midst of his career, we cannot feel that his work was done. He was the type of manhood for young men to emulate, and older men could profit by his example.

Few men have such outstanding qualities as to be long missed in the busy life of the world; but here was one of such conspicuous value that it seems the gap of his passing can never be filled.

Kimball's Dairy Farmer, March 1, 1916.

DR. HENRY B. FAVILL

UNTIRING in his manifold duties; sincere in his convictions; fearless in his speech for everything helpful and good—such was the character of Dr. Favill, president of the National Dairy Council, who died February 20th at Springfield, Mass. His death was due to an attack of pneumonia contracted a week before. Though he did not feel his best he was anxious not to disappoint the New England Dairymen's Association, who had placed him on the program. His illness took a severe turn immediately upon his arrival and the address was never delivered. He died three days later.

During the eight years of his connection with agricultural matters, he has commanded the respect of his fellow workers and the masses whom he was serving. His interest in all things was of the genuine sort. From his profession he not only knew the value of milk as a food, but also the dangers of impure milk. He preached the one and warned against the other. He established in Wisconsin a farm on a practical basis and solved to his own satisfaction the essentials in the production of clean milk. Thus he was sincere and thorough in all things. He had the powerful character so rarely met with in this day and age where commercialism walks hand in hand with all movements for advancement. He was a man whose greatness would have made itself felt in a still larger measure in the years to come, when agricultural development will have reached its real momentum.

Men of Dr. Favill's build, both physical and mental, are few. To realize more fully the capacity of this man's mind, one must become acquainted with the manifold duties he took upon himself. Aside from practicing medicine he was deeply interested in every movement of uplift and sane reform. For years he served the Municipal Voters' League of the City of Chicago as president, successfully fighting dirty politics and in more recent years giving much of his time to the betterment of living conditions. He was on innumerable committees of social uplift and gave each duty the attention required. His excellent record as president of the Dairy Council and director of the National Dairy Show is too well known to require further comment. Dr. Favill thoroughly studied all problems and announced his conclusions fearlessly.

What the editor of the *Chicago Tribune* said of Dr. Favill and his worth to Chicago can well be quoted in regard to his worth to agriculture: "Agriculture might be able to do without men like Dr. Favill, but it cannot well get ahead without them."

Brownell's Dairy Farmer, March 1, 1916.

DAIRY INDUSTRY LOSES A GOOD FRIEND IN DR. H. B. FAVILL

MICHIGAN folks are not generally aware of the fact that in the death of Dr. Henry Baird Favill of Chicago, the dairy industry of this country has lost an invaluable friend. A few Michigan men may know him as vice-president of the Holstein Friesian Association of America, but the thousands of other dairymen in this State have never heard of him either as a Holstein breeder or as a loyal worker for the advancement of the dairy industry.

Dr. Favill was one of the most able members of the medical profession of this country, yet he came to his death

while on his way to address a meeting of the New England Dairy Association. This active, powerful man of middle life, who had acquired enough of fame and wealth in his profession to enable him to live the remainder of his life at ease, succumbed to an attack of pneumonia while doing what he believed to be his duty as a dairyman. It is not difficult to understand devotion to the dairy cause from those who have their worldly all wrapped up in a herd of cows, but it is something fine and noble for a man of Dr. Favill's wealth and medical standing to give so freely to this cause that his death came directly as a result. Not all of the martyrs, as is popularly supposed, are among the lowly, either in dairying or in any other line of human endeavor.

The death of Dr. Favill, at this time, comes as a hard blow to a great project in which he was devoutly interested. This is the National Dairy Council of which he was president. As our friends who have read these pages may remember, the National Dairy Council is an organization of persons, engaged in all branches of the dairy industry, who are seeking to bring about a more prosperous condition in the industry. Of late the activity of the Council has been concentrated on a plan of advertising dairy products throughout the country for the purpose of increasing consumption and thereby prices paid to producers. Dr. Favill was one of the most active promoters of this plan. His address to the New England dairymen was to have concerned itself chiefly with the efforts now being made by the Council to create an annual advertising fund. His enthusiasm, wide knowledge of affairs, and keen insight into the needs of the dairy industry of to-day, enabled him to become a powerful influence in furthering this purpose of the Dairy Council.

His place as leader will be filled somehow from the ranks of those who followed his soldierly figure in the cause of more profitable dairying. In after years, when the dairy industry has become one in which a fair reward is returned

for one's efforts, let us remember that Dr. Henry Baird Favill was the first leader in the present-day effort to bring about that condition.

The New Republic, March 4, 1916.

DR. FAVILL

THE mystery of racial traits is emphasized at the death of Dr. Henry Baird Favill of Chicago. Mainly of white stock, there was Indian blood in Dr. Favill, and it is for his semblance to a group leader and chief that he will long be remembered. He was active and eminent as a medical man not only in a wide private practice, but as a lecturer, a consultant, and a leading spirit in local and national medical organizations. But it was in his personal and communal relations that he was most felt. His magnificent rugged physique suggested the group chieftain. This was fully borne out by his superb vitality, his accessibility, his wisdom of the heart. He had that character common to all big personalities, the inspiring suggestion of a free and unqualified natural force. He kept in Chicago the personal touch with his patients that was natural to his practice in Wisconsin, but he established a similar valuable relation to Chicago in politics, civics, education, and humane organization. Publicity has much to do with popularity. Some popularity is nine-tenths publicity. But Dr. Favill's was a popularity founded on realities. For all the complex and anonymous character of the modern city, his spirit will march on in the places that knew him, very much as the memory of a tribal chief.

The Breeders' Gazette, March 9, 1916.

THE LATE DR. FAVILL

HENRY BAIRD FAVILL served well his day and generation. Death certainly loved a shining mark when its shaft struck him down at the apex of his career of public service. An American of the highest

type, boasting the trace of Indian blood which gave him striking physical distinction in any company, educated for eminent service, his vigorous young manhood quickly ripened into a career which gave him first rank among the physicians of Chicago, a commanding eminence in the nation's medical circles, and brought him into a field of usefulness in the dairy cattle breeding industry of recent years which was yielding rich and far-reaching results.

His early years were spent in unsparing service in the medical profession. Few men have climbed so quickly into eminence in the profession, but such natural gifts as Dr. Favill possessed, utilized with singleness of purpose for humanity's sake, could not have unfolded a less conspicuous career. As a practitioner in the homes of the leading citizens of Chicago, and as a lecturer in its eminent medical colleges, Dr. Favill has written pages of permanent history in the profession.

As a publicist he was scarcely less distinguished. He was a born leader, and, entertaining the highest ideals of civic life, he rendered high service to Chicago at a time when its civic ideals had fallen to a low ebb by reason of the activities of the vicious and the indifference of the better element. When he was asked how he could find time amid the pressure of his professional duties for such work, he replied simply that he felt an obligation toward the public life of Chicago which he must discharge.

His services in professional and public life are history. His helpfulness to the dairy cattle industry was in the making. As soon as his financial condition permitted, he began to indulge his innate love for land and live stock, and no keener pleasure ever came into his life than that derived from his dairy farm. His heart was in it, and as often as he could steal away from the demands of his practice he found his greatest satisfactions in life in the company of stock breeders and on his Wisconsin farm. He was

Vice-President of the Holstein-Friesian Association of America and would have become its President at the June meeting. His broad vision gave form and character to the National Dairy Council, of which he was President, and he had projected through that organization plans which are pregnant with benefit to the dairy industry.

Personally he was the most charming of men. Cultivated in the schools and universities, polished by the attrition of the higher walks of professional, financial, and social life, he was typical of the modern gentleman who excels the traditional gentleman of the old school, because his opportunities have been greater for the development of the graces and courtesies of a real gentleman.

And he was "Harry" to his friends, who loved him. Simplicity, loyalty, and service were the keys to the character of this man, whose departure has left the world poorer in its possession of full-made men.

Wisconsin Alumni Magazine, April, 1916.

HENRY B. FAVILL

HOW like a giant oak he constant stood,
His face forever turned to meet the blast;
The sturdy trunk rising to Heaven's light,—
Faith in the Future,— Wisdom in the Past.

The Woodman now has felled the massive tree;
On Mother Earth its branches softly lie;
What a sad void doth mark the landscape fair
When monarchs full of life, like him, must die.

Beneath the sheltering arms rooted and grew
Full many a tender shoot to vigorous age;
He drew the lightning's blow, the thunder's crash
And saved the weaker things from Nature's rage.

But 'cross the fallen oak now streams the sun,
And smaller trees and seedlings thrive anew,—
So the warm life he fostered brings its fruit
To crown his life, so noble, tried and true.

F. D. SILBER, '94.

The Open Air Smile, February, 1917.

ONE OF CHICAGO'S GREAT MEN —
DR. HENRY BAIRD FAVILL

THIS month when we are honoring two great Americans it is fitting that we pay tribute to one of our own great men of Chicago—Dr. Henry Baird Favill, who was taken from his field of activity just a year ago.

Against the background of patriotism which this month creates, the figure of Dr. Favill stands out as a true American. Every citizen of Chicago—every boy and girl in the schools—owes Dr. Favill a real debt, for he spent his energies unceasingly in the interest of the best things for the community. The Civic Creed, which the boys and girls of the open air schools know so well, was truly expressed in Dr. Favill's life: "We want, therefore, to be true citizens of our great city, and we will show our love for her by our works. Chicago does not ask us to die for her welfare; she asks us to live for her, and so to live and so to act that her government may be pure, her officers honest, and every corner of territory shall be a place fit to grow the best men and women who shall rule over her."

In this spirit, Dr. Favill worked zealously for a better city, believing that it was the duty of every citizen to give his best to his country and community and that only in this way would our city and national government be carried on honestly and for the interest of all.

He held himself and his profession as a public trust, working with devotion for the good of humanity.

The spirit of Washington and Lincoln, whom we honor to-day for their devotion to their country in her hour of great trouble, moved also this great man of Chicago, who in the doing of his duty toward his fellowmen and the community from day to day exemplified the kind of patriotism that every boy and girl will be expected to show as a citizen. Not long before he was called away, Dr. Favill, in addressing a gathering at which he was the guest of honor, said: "Never in the history of this country has it been so imperative that every honest, able-bodied, red-blooded, clear-thinking man should have his mind set on what is the right thing for him, for his community, and for his country to do."

Dr. Favill was admired and loved by all who knew him, mingling with the strength of mind that matched his giant-like stature, a gentleness and sympathy that made him the friend of man and leader among men. He was most human in his sympathies, never finding it too much trouble to be of service to those who sought him—and these were many, for his genial and commanding personality drew people to him from all walks of life.

One time a group of people were talking with Dr. Favill about their ancestors, how and when they came to America, and where from. Someone asked him whether his ancestors came on the *Mayflower* or on the *Speedwell*. Dr. Favill said, "No, but some of them were on the reception committee that welcomed the people who did come on these ships." This was his way of telling them of the fine strain of Indian blood that was in his veins, and which, perhaps, helped to explain his love for the woods and fields and for the great out-of-doors.

He truly loved the out-of-doors. It was a joy to see him swing along the street, head erect, chest thrown out, and his nostrils fairly joving in the air which he seemed to love to take into every portion of his lungs. He walked a great deal, and even if he was on the crowded streets of a

great city his mind would take him to the fields and mountains, and he evidently got his clear mind and his great vision and judgment from being able to learn the lessons from nature, just as we read that certain wise men of old were those who took care of their flocks by day and night on the hills, and who studied the stars to know the time and to get their directions and to learn the mysteries and beauty of the heavens.

As a most skillful physician, he threw the force of his splendid mind against the unhappiness and suffering caused by disease. He filled a large place in our city and nation, working with many organizations to improve the physical and social conditions of mankind. As a part of his program for good health for the city he worked to establish bathing beaches, parks and playgrounds where throngs of grown-ups and children may play in the out-of-doors.

He was very much interested in everything that would make people strong and healthy and happy. And he knew that the way to do this was to begin with the boys and girls. He was interested in the schools, for he knew that all the boys and girls must go there, and he wanted the teachers and the school board, and everybody that was responsible for their education, to be sure that they had fresh air and exercise and good advice about health habits. He thought the school ought to be sure to help give the children good, strong, healthy bodies as well as trained minds. He believed heartily in the open air schools, and from their very beginning in Chicago he was their friend, and the adviser of those directly connected with them.

Not only because he was our good friend, working for all the best things that will make for happy, healthy lives, but because we wish to do honor to one of Chicago's greatest men, we dedicate this number of the *Open Air Smile* to Dr. Favill.

The greatest tribute we can pay him is to hope that we may learn to live nobly as he lived, to love our fellowmen

as he loved them, and to value the best things in life as he valued them.

At the memorial meeting, held in the City Club last year, lines from Edwin Markham's "Lincoln" were read as a tribute to Dr. Favill, which have double significance for this number of our paper:

The color of the ground was in him, the red earth;
 The tang and color of the primal things —
 The rectitude and patience of the rocks;
 The gladness of the wind that shakes the corn;
 The courage of the bird that dares the sea;
 The justice of the rain that loves all leaves;
 The pity of the snow that hides all scars;
 The loving kindness of the wayside well;
 The tolerance and equity of light,
 That gives as freely to the shrinking weed
 As to the great oak flaring to the wind —
 To the grave's low hill as to the Matterhorn
 That shoulders out the sky.

He held his place —
 Held the long purpose like a growing tree —
 Held on through blame and faltered not at praise.
 And when he fell in whirlwind, he went down
 As when a kingly cedar green with boughs,
 Goes down with a great shout upon the hills
 And leaves a lonesome place against the sky.

DR. FAVILL'S FUNERAL

CYRUS McCORMICK, Edgar Bancroft, and Dr. Dudley assumed the large task of arranging for Dr. Favill's funeral in Chicago, and in this way took from the grief-stricken family a burden which they will never forget. The service was held in the Fourth Presbyterian Church, Lincoln Parkway and Delaware Place, in the forenoon of February 22, 1916. The church was entirely filled, largely with prominent Chicago men, and Rev. Dr. Frank W. Gunsaulus presided. After music and a brief scriptural selection, he read Bryant's "Thanatopsis." The Rev. John Faville, a cousin of the Doctor's, offered prayer. A special train had been provided by Mr. McCormick which then took a large number to Madison, Wis., for the burial. There Mr. C. H. Tenney had kindly made all arrangements. The party was driven out to Forest Hill, where Rev. E. G. Updike, assisted by Rev. John Faville and Rev. Henry Faville, spoke the last words. The Chicago friends then returned to the special train and home.

The active pallbearers were: Wheaton Augur, Gerald M. Butler, F. Goddard Cheney, Dr. Nathan S. Davis, Jr., Dr. Frederick A. Jefferson, George Richardson, Dr. Eugene S. Talbot, Jr., Henry Favill Tenney, and Horace Kent Tenney, Jr.

The honorary pallbearers were: E. A. Bancroft, Cyrus Bentley, Dr. Frank Billings, Dr. F. H. Blatchford, W. J. Calhoun, Dr. Charles P. Clark, J. M. Dickinson, Dr. J. M. Dodson, Dr. E. C. Dudley, Victor Elting, Kellogg Fairbank, J. J. Glessner, Frank Hamlin, Dr. Ludvig Hektoen, Dr. Henry Hooper, E. D. Hulbert, David B. Jones, Frank H. Jones, Dr. Thomas H. Lewis, Cyrus H. McCormick, R. B. Ogilvie, Allen B. Pond, Frank H. Scott, and John W. Scott.

THE HENRY B. FAVILL SCHOOL OF OCCUPATIONS

AT a meeting of the Illinois Society for Mental Hygiene, of which Dr. Favill was the first vice-president, held on Wednesday, October 24, 1917, it was decided to name the occupational department of the society "The Henry B. Favill School of Occupations."

This department was started as an experiment, in 1914, largely to serve as a clearing house for cases of doubtful insanity which the courts considered as showing promise of return to usefulness if given a proper environment and trade. In the last three years many charitable organizations have come to depend upon the department for dealing with the chronic misfits of society—the family head who has the wrong job and is doing poorly—the ne'er-do-well with a latent talent to be discovered—the bewildered foreigner driven practically to mania by misunderstandings. Such cases, which seem to hold phases of mental maladjustment, are carefully studied under advice of medical experts and helped to a satisfactory solution.

This work has so far been limited to Chicago. Now, by request of the State Criminologist and the State Alienist, teachers are being trained for use in insane hospitals, prisons, and reform-schools throughout Illinois.

In view of the success attained in many cases of merely physical handicap, the department has been appealed to for training of specially selected groups of volunteers for service in military convalescent hospitals. Such classes are being sent by the Red Cross and by the Home Charities Department of the Women's Committee, State Council of Defense, Illinois Division. The necessity for this type of work has been shown in Canada, where it was stated recently that 1,000 such trained volunteers were needed.

As the work had its beginning in his office; as it was largely due to his steadying and wise counsel and constant interest during the hard formative years that the work has grown to its present usefulness; and as sympathy, understanding, kindliness, science, and common sense—all so essential to this work—were so characteristic of Dr. Favill, it seems peculiarly fitting that this department should bear his name.

(Signed) ANNA HAMILL MONROE,
President, Illinois Society for Mental Hygiene.

REPORT OF THE MEMORIAL COMMITTEE

[It was hoped that the report from the committee (see p. 71), organized by the City and Commercial clubs to propose a memorial for Dr. Favill, would be finished in time to be included here. The report, however, is not quite completed, but when ready will be mailed to all who receive this book. Inquiries may be sent to MR. EDGAR A. BANCROFT, 606 South Michigan Avenue, Chicago.]

PART TWO

ADDRESSES AND PAPERS

I. MEDICINE AND PUBLIC HEALTH

PART TWO

ADDRESSES AND PAPERS

I. MEDICINE AND PUBLIC HEALTH

DIET AND DISEASE

[Date and occasion of writing unknown.]

I THINK I should falter before presenting to an audience of even kindly men a fragment of reflection so distinctly suggestive of my shop were I in the least responsible for my subject. I fancy that your committee saw fit to take no chances of my exposure to general dissection by limiting me to a field which few have willingly entered. I do not propose, however, to forego the modest assertion that this is, of all topics of human interest, the most important. This statement harmonizes well with the shop. Moreover I demand that he who points his finger of scorn at this rather commonplace matter should have smooth joints, whereby to demonstrate his elevation.

It ought to require no argument, that man originally ate to live, and the inference is not remote that he usually deserved what he got. With the foreshadowing of modern license occurring in the Garden of Eden we need not struggle now.

Nothing can be more perfect than the automatic adjustment of supply and demand found in the quest of primitive man for food. Never has civilizing man ventured to tamper with that relation without paying the penalty. I am asked to discuss the mitigation of these penalties as related to the taking of food, particularly from the standpoint of the physician.

The complex system of functions whereby life is maintained is finally incumbent upon one factor, the possibility

of introducing extraneous material into organic union. Life implies energy and energy implies dissipation, and to any individual life such dissipation is waste. Hence, waste and repair come to be correlative terms which cover the whole of vital experience. Their equation may not be greatly disturbed without disaster. It becomes necessary therefore to provide means for appropriation of material for food, and the proposition is at once involved.

Let us reflect that the process of digestion is a series of destructive acts whereby the very complicated substances of which our food consists are split up into simpler forms, from which are built new chemical structures, which are in turn broken down, or more properly burned down, and discarded as ash.

To the physiologist the food problem is one of chemical constituents rather than physical forms. The atmosphere, air, is to him as distinctly a food as that which is eaten; the gains and losses through the skin as pertinent as the more obvious exchanges. Hence, to satisfy a critical inquiry the entire ingesta of an individual must be accounted for with mathematical exactness by definite formulæ.

The organs necessary to these transformations are many; the functions of each well-defined; their adaptability to imperfect conditions limited. Hence, upon the integrity of various organs must rest the value of the complicated series, called metabolism.

Nowhere is more obvious the relation of a chain to the weakest link, for, though we have frequently joint and coördinate function, we have virtually no vicarious function. Each step in the great act of assimilation therefore is essential. Each organ must pass on to its successor a product fitly transformed, or the balance of activities becomes disturbed. Thus, either the function of the recipient organ is not performed, or it is performed at such disadvantage as perhaps to determine its own premature degeneration. Hence, it is very obvious that the importance of any default

in a given vital process must be determined by a perspective view, in which the intrinsic flaw may be frequently subordinate to the burden of compensation devolving upon succeeding factors in the nutritive sequence. All of this proceeds automatically under normal conditions, present and historical.

Immediate normal conditions are hard to define, but are closely dependent upon the maintenance of the relation of supply and demand. If this ratio be normal, health will result, providing the further law of selection be allowed to operate. It is in the historical aspect that the most inflexible limitations occur. Consider that the smallest physiological trait, the most obscure nutritive vice, may be as transmissible as facial features or mental quality; that these may appear in offspring intensified actually by breeding or relatively by aggravation of conditions of life. Reflect that the tendency of civilization is to determine both conditions, and one is forced to acknowledge that he owes much to his ancestors.

Digestion of food is of course fundamental to nutrition. Yet, as we regard the term as applying to the primary acts whereby food-stuffs are rendered soluble, it is a very limited part of the process. Food which has been properly and completely digested as a primary act is utterly unfit to be taken into the blood and circulated. It requires further transformation, taking place variously back to more nearly its original form to avoid the curious circumstance that in its fully digested state it is actually a poison. Given, however, its fitting digestion and transformations, which may be termed secondary digestion, it has but entered upon its mission as *paulum*.

It is in part stored, in part passed on for immediate appropriation—by what? By every individual cell of the organism; and here is the great unexplored territory. What happens within the limits of the microscopic cells, each one a living thing capable of all the requirements of

self-support, must remain largely in doubt. However, it is clear that in this final distribution of food through the circulating blood, in the complex chain of activities covered by the terms growth, repair and excretion, taking place constantly in every cell, there resides the all important relation of food to organism.

Of one fact we are aware which furnishes perhaps the most definite guide to our physiological conclusions. The processes whereby energy is liberated, reparative interchange takes place, and effete material is discharged, involve oxidation. The comparison to a heating apparatus is exceedingly apt. The three elements of absolute, correlative dependence, are fuel, combustion, and ash.

Whatever of virtue may reside in food or its preparation, its value to the economy must be considered strictly in the light of the combustion facilities of the body. The needs of the tissues determine for the most part the rate of oxidation, and these needs are themselves determined by cellular depletion resulting from physiological discharges of energy. Hence, the inseparability of food and work in this discussion.

The systematic demand for food is the criterion by which to gauge the indulgence in food and unfortunately bears little relation to appetite. Hence the complexity of a fundamental question which involves the interpretation of facts and conditions, apparently irrelevant.

It is not an unfair question, why this combustion process is so essential. Assuming the oxidation as the best known of the chemical changes which food undergoes, we may assert that two important facts exist. First, that the products of incomplete oxidation are in themselves noxious and hence a menace, and second, that the incomplete changes in the food diminish its fitness for excretion, presenting to the excretory organs products which cannot be eliminated, or are eliminated with difficulty and imperfectly. Hence we encounter two things: the circulating medium surcharged

with unfit material, and organs of relief struggling with an abnormal requirement. This brings us to the question of elimination.

Few of us realize how constantly and to what degree we depend for life upon the performance of our eliminating organs. It is marvelous, in the light of all vicissitudes, that more destruction does not occur at this point.

Consider that every being incessantly elaborates poisons, which accumulating to a sufficient degree in the system produce disease. Such poisons are as incessantly discharged through the emunctories, but were this absolutely to cease for even a comparatively few hours, the burden of toxemia, as we say, would be fatal. From this extreme result through all the shades of influence to the least severe, we find failure to eliminate at the bottom of vast amounts of disorder. That this failure to excrete may be due to several conditions is to be inferred from the preceding discussion; but whether the retention of waste is the consequence of damaged or inefficient excretory tissue, or of antecedent breaks in the nutritive process, whereby the waste should be changed to a form fit for selection by the organs of elimination, the result is systemic poison by products of intrinsic activity.

It is apparent, therefore, that there becomes established a vicious circle under such conditions, wherein a final excretory defect determines a toxemia which aggravates each preceding vice.

Food is the ultimate stumbling block in all of these perverted functions. The necessity to take food, the essential transformations through which it must pass, and the physical incapacity to effect these indiscriminately, furnish the grounds of the therapeutic struggle which is called dietetic.

There is a vagueness of conception as to the essential character of a so-called "diet" which is truly remarkable. There is likewise a uniformity of expression and of phraseology which is most unique. This is to be remarked no

less with the profession than the laity. The question has not as yet passed the point of arbitrary schedule. Its newness is evidenced by the narrowness of the path which traverses it.

We discover plenty of physicians advanced enough to prescribe diet for the fat, the lean, the gouty, the nervous, the phlegmatic, and so on, but as yet we must admit the mild impeachment that the prescriptions are more nearly uniform than the highest grade of therapeutic analysis would really demand. On the other hand it is to be said that the principles underlying the adaptation of food materials to given physical demands are so few and simple that apparent sameness easily occurs.

The individual peculiarities which distinguish one clinical picture from another often disappear when reduced to their ultimate causation. It is the ability to reduce a morbid process to its simplest terms, to select from a tangle of symptoms the important thread, and follow it to its end, which marks the diagnostician. It is as true here as elsewhere that accurate diagnosis is a most necessary foundation for a therapeutic procedure. People fail to grasp the importance of this fact; fail to credit the profession with desire, and especially with the ability to satisfy this requirement; fail to recognize the dignity of a considerate avowal of ignorance.

Recently, a man said to me, "My physician has not been able to make up his mind what ails me, but the druggist told me right away and gave me some medicine." Wily tradesman, who knew too well that the average man demands action rather than reflection!

A specific diet may be indicated for either of several conditions, which will in general fall into four more or less distinct classes:

1. Diet selected for the correction of defects or vices in primary digestion.
2. Diet with regard to defective secondary digestion.

3. Diet in cases where there has been excessive intake.
4. Diet to accommodate decreased elimination.

In the first will be included many forms of so-called indigestion, and dyspepsia. The varieties of indigestion are many and although presenting indications of disturbance in common, to be separated by careful analysis into distinct groups. There occurs a failure of digestion which should go on in the stomach, so-called gastric indigestion. For this occurrence there are many causes—(a) failure to secrete efficient digestive fluid, (b) secretion of too much or perverted gastric juice, (c) inactivity of the muscular apparatus of the stomach, (d) various distinct disease conditions, for the most part catarrhal or ulcerative, which offer more or less obstacle to digestion and are themselves very responsive to digestive conditions. Such conditions are quite usually associated with some degree of consequent mal-nutrition. The defect is at the fountain head; the process fails whereby the inert matter of the outer world is transformed into usable material, and a proportionate starvation results. Such are the greatest dangers of infancy. In the adult the prospect is rather of distress than of disaster.

Unfortunately these negative conditions are aggravated by positive complications. If food does not go properly, it goes very objectionably. It has no tendency to be simply neglected. The changes in food which is not digested are by far the most urgent in their demand for correction. Fermentation and all that depends thereon is the usual event.

The diet appropriate to any such cases is variable. Not infrequently it is tentative, because of insufficient knowledge as to exact requirements. In general, however, it must conform to three requirements. It must be, (1) unirritating, (2) subdivided, that is mechanically accessible, and (3) such as to leave the least residuum favorable to fermentations of the type in especial question.

Failure of the stomach to carry on its part in digestion

is perhaps the least serious of digestive defects. At intervals more or less irregular the stomach unloads itself into the intestine. By so doing it accomplishes for its own relief what we imitate often in practice. It discharges its contents more or less digested into a viscous whose powers are similar though much greater.

Amongst other functions it is the work of the intestine to assume the digestion where it is left by the stomach, and complete it. It is possible for the intestine to accomplish the whole act from the beginning. Hence the default of the stomach is mitigated by the broad capacities of the intestine. To any degree in which it performs more work than is normal, because of gastric failure, its act is always vicarious. Beyond this, its function is to digest all of the food-stuffs which reach it up to that time untouched.

Foods are of three general classes, (1) Proteid, by which is meant albumens, meat, eggs, etc., (2) Carbohydrate, including starches and sugars, (3) Hydrocarbon or fat. Of these the stomach can digest only the proteid to any considerable extent, but no end of outside influence may affect the starches and fats while in the stomach awaiting a further stage, and the propriety of introducing them into the diet of stomach disease depends quite upon the variety of gastric disease.

Intestinal indigestion it will be seen is possibly of much more serious importance. Its normal functions are broad and the importance thereof great. It is not to be relieved or its defects repaired, by the act of any successor. The conditions which are grouped under the general term intestinal indigestion are in fact several, furnishing a field for great diagnostic acumen. Here, as in the stomach, the questions involved are those of nutritive lack on the one hand, and irritative decomposition of residual food on the other. The former may be the efficient cause of great bodily failure, the latter the irritative step leading to far reaching disease.

The selection of food for the relief of these intestinal conditions constitutes our most satisfactory means of treatment. Because of the fact that it is a final process with no auxiliary successor, the course ordinarily pursued varies from that pursued with the refractory stomach. In the case of the stomach we are inclined to put upon it legitimate burdens, freeing it from the embarrassment of incidental vices, and depending upon the intestine to make good any shortcomings. In the case of the intestine we are inclined to spare all burden possible, forcing the stomach to its highest pitch with a view to relieving the intestine of worry. All food fermentation tends to produce disease of the surfaces which include it. Hence, for a further reason we seek to avoid undigested residue, which introduces the second class of dietetic problems occurring in the course of what I have termed, quite arbitrarily, secondary digestion.

Previously it was stated that proteid food which has been fully digested in the stomach or intestines in the so-called peptone stage, is unfit to enter the blood for general distribution. It must be transformed to a condition chemically much nearer to the form from which it started. In a measure the same is true of starches and fats. This remarkable and really protective function resides in two organs, to what extent parallel in powers is uncertain. These are the liver, which all food traverses before entering the general circulation, and, more especially, the intestinal wall, which all food stuff must penetrate before it can be regarded as within the body. In the course of this simple penetration it is now conclusive that the most important changes occur of the nature just referred to. Physiological chemistry fails us at this interesting point so that we have not knowledge of the chemical changes which normally take place, but clinically we know that upon the integrity of the mucous membrane of the intestine depends in great part the chance of secondary digestion. Hence the gravity of intestinal fermentation. Hence the significance of hereditary

mucous membrane defect, at this point more potent for harm than at all other points in the body.

If this barrier to improper food is destroyed the system becomes intoxicated. This is no speculation, it is a common experience and the bearing of these facts upon the constitution of the blood is vital.

The relation of diet to this question differs somewhat from the foregoing adjustments. In so far as morbid action depends upon intestinal indigestion and its results, the dietetic treatment is addressed to that condition. If, however, the primary digestive act is complete and the secondary processes essentially at fault, the effort to correct by diet becomes a plan to get around the difficulty rather than to establish complete restoration. Such are the features of the procedure adopted in the diet of the gouty. The very initial position which we assume with regard to them is a confession of partial defeat. We declare, "There are kinds and degrees of feeding in which you may never indulge, hence your disability we respect by carefully avoiding the issue." Efficient and beneficent though these methods be, they may not be said to be other than broadly palliative. It is here, particularly, that we find occasion to regard most seriously the historical aspect of food physiology. Hereditary defect in the food transformations, taking place between the mucous membrane of the intestine and the vessels which carry the perfected blood away from the liver for general distribution, is the most important fact in the pathology of so-called constitutional disease. It is manifest in the earliest infancy, changes and marks its form in a multitude of ways during youth and adolescence, and matures into more or less typical disability in middle life, but bearing throughout the unmistakable stamp which identifies, as a consistent group, the protean aspects of disease with a score of titles.

The third class of conditions whose dependence upon food supply is intimate, includes the cases of normally

constituted blood for which there is not adequate demand; which seems perhaps improbable. However, it is clear that a perfectly normal digestive act, affording a normal nutriment, may be associated for a time at least with abnormal rate of consumption of nutriment which will disturb the balance of nutrition.

In our modern methods of living this loss of relation is of frequent occurrence. Nutriment is furnished to the tissues of the body in excess of their demands. Their capacity to take up is limited by their capacity to destroy. Oxidation, the process by which all chemical transformation occurs, by which food fuel becomes transformed into waste ash, is measured by the intrinsic energy of the cell.

Excess of food involves incompleteness of combustion, so-called sub-oxidation, which determines absolutely the loading of the system with products whose usefulness as food is gone, and whose fitness for elimination is far from perfect. With this disproportion between food and expenditure we are daily confronted. The readjustment is rarely complicated. The principle is stable: more work, less food or frequently both.

The fourth class of diseases to which I wish to allude are those in which elimination of effete material is decreased. As a feature of the foregoing diseases deficient excretion is usually pronounced. The reason in these events, however, is the imperfection of the processes which should have prepared the waste for elimination, and, however pernicious, not to be charged to the fault of the eliminating organs. Unquestionably, however, these several conditions of nutritive failure are the efficient cause of what we now approach, organic disease of the principle organs of elimination, the kidneys, and at this point we encounter limitations most exacting.

Kidneys which have become impaired have proportionately lost their power of selecting waste from the blood and hence, by that default, burden the body with what is

most deleterious. The degree to which this takes place, of course, determines the gravity of the situation, but it is always grave for two reasons: (1) The poisoning of the system is of serious character and leads to wide degenerations, and (2) the continuance of a demand for activity of the organ beyond its capacity rapidly advances its own disorganization. Hence, in this condition the rule is invariable. Reduce the demand upon the organ of elimination to as nearly its performing capacity as possible, thereby striving to preclude accumulations, and by relief of overstrain to maintain the highest possible integrity of structure.

The possibilities in this attempt are almost exclusively dietetic, and the results are, even in desperate matters, most striking.

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TREATMENT OF CHRONIC NEPHRITIS

NO view of the treatment of nephritis can endure that does not comprehensively consider the etiology of renal degeneration. I use the term degeneration advisedly, because in only a very small proportion of cases is an inflammatory process truly present. Clinically speaking, we are apparently at variance with the pathologists, and yet I assume that it is apparently at variance rather than actually. Clinically, nephritis is a progressive nutritive perversion, leading to greater or less necrosis, terminating in more or less substitution of one histological form for another. There can be no doubt that in the majority of instances the sequence of occurrence is this. Again, when we come to consider the etiology, we have to regard the causes as essentially and broadly three; namely, vascular, septic, and toxic causes. Into one of these three categories will all of the causative factors of nephritis ultimately fall. The importance of these various factors arrange themselves according to the characteristics of the case. Upon these various etiological factors must rest the principles of therapeusis. The details of therapeusis, however, must have a somewhat further foundation upon which to stand; in other words, we must have, in order to adequately select and administer a therapeutic procedure, to some degree or other, a classification, and the subject of classification has hitherto been most unfortunately complex. Clinically, it must be evident to those who have heard the papers this evening and who are disposed to agree with them, that there is at some stage of the proceedings non-organic change, in which nephritis is potentially present. There can be no doubt that at a variable period before organic change can be detected there is present in the

functional performing capacity of the cell a serious defect. This being the case, it becomes a most interesting problem how remote should be the period at which we should undertake to treat nephritis. Practically and clearly the question must be answered—as early as the diagnosis can be made; and hence the question arises, Can the diagnosis be made previous to anatomical degeneration? Upon that point I cannot stop to dwell.

I wish to refer purely to the cases of nephritis of the earliest period possible for diagnosis. At this period it is possible to make a diagnosis when the anatomical destruction of kidney is very slight, and it is at this period that the therapeutic possibilities of the treatment of nephritis lie. Hence the treatment has a distinctly different character as applying to the early and to the late forms of nephritis, and a clinical distinction is safe, and as a working hypothesis reasonably correct, which distinguishes between incipient and advanced nephritis. The primary indication upon which must rest the treatment of nephritis is to present to the kidney for excretion such products of food metabolism and tissue change, in other words, such waste products, as are fit for elimination and in no larger quantity than is within the capacity of the kidney to excrete; and all measures, medicinal, hygienic, and others, which are of any value in the treatment of nephritis, contribute to this end. A moment's consideration of this proposition will show that if correct, the treatment of nephritis is essentially hygienic, and amongst other hygienic possibilities most noticeable is the dietetic. It would be interesting if it were possible to dip into the ultimate physiology of food stuffs. It is hardly the thing to do, and yet one hesitates to advance statements more or less dogmatically upon so profound a subject. The fact, however, briefly stated, is this: The quality of the excretions depends upon the perfection of bodily combustion. Excluding now external intoxications and various other things which I do not wish to touch, the

question of food stuffs with reference to excretory principles is essentially the question of the perfection of oxidation, and if this is true in nephritis, and if it is additionally as true in gout, both of which I believe, the selection of a definite line of procedure dietically considered, for the treatment of nephritis, becomes, at least in principle, simple, in detail frequently complex. I touch upon this for the purpose of, if possible, harmonizing to a degree the various apparently diverse recommendations of unquestioned authorities as to dietetic selection in nephritis. You will find the same variation in recommendation applying to the treatment of gout, and the same explanation which will harmonize one will harmonize the other, and I believe that they are essentially in harmony.

The question is, What are the offending food stuffs in either condition? There is no question amongst observers, that the essential offending element in both nephritis and gout is defectively oxidized nitrogenous food. Yet we find one class of observers recommending nitrogenous food, and another class of observers absolutely prohibiting nitrogenous food. Are they opposed or are they in harmony? I believe that they are in harmony in principle; that is to say, I believe that they approach the subject from opposite sides of a common centre. Why is nitrogenous food not oxidized? Because in a mixed diet it is the most difficult of oxidation, and hence the oxidizing possibilities are, as a rule, absorbed by the more easily oxidizable food with the result of leaving a residuum of unoxidized nitrogenous food, the so-called suboxidation product. On the other hand, the oxidization of starches and sugars as opposed to nitrogenous food is easy, quick. The theory of the therapeutists who withdraw the starches and sugars in the treatment of nephritis and gout rests in a measure upon an endeavor to withdraw the easily oxidizable food, thereby concentrating all oxidizing power upon the more resistant, and thereby saving digestion in many other respects.

Conversely the nitrogenous food is withdrawn to prevent the accumulation of suboxidized nitrogen by withdrawing the source of supply. It is not a difference in principle, it is a difference in judgment as to the best way to accomplish the same thing. I discuss this for the purpose of showing that I do not ignore the opinions of the vast class of good observers who do not think dietetically as I do upon this subject. Personally, I consider that the treatment of nephritis should be largely a dietary, in which the nitrogenous food is withheld; in which the meat and other essential albumins, proteids, are withheld, with the exception of the proteids contained in milk. Clinical experience, I think, bears this out, and the question to what degree the diet should be confined to milk turns largely upon the question, what is the essential stage of proceeding; in other words, what is the functional metabolic capacity of the system with reference to other foods? Hence the treatment of nephritis, theoretically and typically, I would say, should be the treatment by a milk diet, which is impracticable, as a rule, exclusively. The question arises how far beyond a milk diet one is warranted in going. And the reply should be, as far as he can convince himself that the system will properly transform other foods, completely oxidizing them and completely excreting them. The basis of the measure which we have of the oxidizing power is the urea, and it is upon the rise and fall of variations in urea that I would lay the greatest stress in the current estimation of the systemic doings of the patient.

Medicinally, as bearing upon this question, there are only one or two suggestions which I care to make, because with all the raft of therapeutic measures that have been employed the ones which are good are few. I consider that the administration of iron in any form that you choose which is well managed, is an efficient means of treatment, and this in any stage of the disease in which there is an essential anemia. The reason why, probably, iron is of

such value is because it adds to the oxidizing machinery of the body, because it adds the element which helps the distribution of oxygen. In addition to iron, I consider the administration of small quantities of mercury and especially of calomel, given for a more or less long period, to be of the greatest value in the treatment of nephritis. I believe that the influence of calomel upon the food metabolism and upon the tissue waste and destruction, as influenced by the liver, is distinctly possible by the long-continued minute administration of calomel. Much will depend upon the individual, but as large a dose as can be administered persistently without affecting the bowels should be given, and this on an average will range from one-twentieth of a grain three times a day to one-quarter of a grain three times a day, to be continued for periods of a month, two months, or six months, as the case may be. It is distinctly alterative and affects the metabolism occurring in the liver. Upon these two drugs I would rest the majority of my medicinal therapeutics, and I would hesitate to go outside of it in discussing other things, because there is no limit.

The treatment of the later stages of nephritis in the larger proportion of cases is the treatment of the complications, or the coördinate factors of disease rather than the essential nephritis. The treatment of the complications of nephritis should be determined as they arise, in the majority of cases, and should assume the more prominent position.

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TOXIC CORRELATION

IN regard to this somewhat startling title I wish to explain that my idea is to suggest the fact, that there exist in our clinical experience many conditions and combinations of conditions, whose origin and sequence bear to each other very close relation, and that not in haphazard ways but in ways most methodical.

We are now in the era of observation of toxic phenomena, and see with a distinctness heretofore impossible much of the truth which unlocks obscure situations.

It is noteworthy that the legitimate fruit of the most advanced research is a well-demonstrated humoral pathology, the limits of which one dare not at this time suggest.

After all the satisfactory light shed by cellular pathology, the query was bound to come, Why has a cell a pathology? The answer has come provisionally and is furnished by chemists and biologists as follows: The perverted cell has three main sources of its degeneracy, (a) Its nutritive supply corresponding to environment, (b) its innervation, constituting its functional experience, and (c) its tropic control; all evolved under the potential of its heredity.

Therefore when we regard morbid states as the aggregate reaction of the molecular body subject to those influences, need we be surprised that the simple pathologic conditions take multiple forms, or that various unlike manifestations may trace a common origin?

I wish to confine my comments to conditions which are explained by toxic materials in the circulatory blood, and to define toxic in such terms as to imply material which is noxious, either in kind or in relative amount.

It is not possible, even if time permitted, to define the

nature of the toxic substances to which one so frequently refers. However, every rational analysis, every analogy, lends color to the assumption that the blood is the means of distribution, in addition to its normal constituents, of extraneous or accumulated agents which are, broadly speaking, toxic.

Most obvious of these circulatory distributions are the systemic poisonings occurring in the course of septic disease. It is at this day superfluous to argue the toxic quality of blood so impregnated. The destructive effect upon tissue is too familiar for comment. And yet these are but the acute and exaggerated prototypes after which follow innumerable less pronounced intoxications whose clinical manifestations have until recently borne the names of individual diseases.

There must be dissected and rearranged all of the complex subjects included under various asthmas and rheumatisms, bronchitides and headaches, dyspepsias and diarrhoeas—each with its many sides, and all susceptible of more or less correlation.

As a text for my remarks I wish to state simply the facts in a case selected from many of similar import, because of its greater variety of morbid phenomena.

A young woman of thirty years of age, whose health had never been excellent, had had since childhood a cough, in character loose, accompanied at times by profuse expectoration. At twenty-five years, she fell into so-called nervous prostration and in the course of it developed what has been called asthma, which was for a time, and has been at periods since, very obstinate.

In addition to this, and in behavior quite different, she has periods of great dyspnoea, accompanied by cold extremities, great prostration, and always associated with gas in the stomach or bowels.

About the period of the development of the asthma, she began to have what was regarded as rheumatism of knees

and various joints, which was wont to recur with much irregularity.

During all the period and in fact, in a minor degree, always she has been prone to looseness of the bowels, latterly amounting at times to diarrhoea, of weeks' duration.

During the course of the various phases, she is liable to become much reduced, and to be under the general suspicion of having consumption.

It is impossible to convey an adequate idea of the elusive and surprising character of this case. It is, however, typical of conditions which we encounter often less pronounced. As to its behavior, a word. The two features, asthma and rheumatism, are very sure to recur in given circumstances; often recur together. As a rule their exacerbation is preceded by a disturbance of the digestive tract, indicated by bloating and discomfort. If these conditions continue, diarrhoea is likely to recur, and as it continues, the distress of breathing, and the pain in the joints, often are mitigated.

Frequently, however, these two conditions seem to be, as it were, reciprocal, and when the rheumatism is relieved medicinally, the asthma promptly sets in. The special dyspnoea above referred to appears quite accidental, is associated with gas in the stomach and the general accompaniments of vasomotor spasm. In fact it is an angio-spasm of reflex origin, and usually transient. As I have indicated, the periods of diarrhoea and profuse bronchial secretion are liable to afford comparative immunity from the more painful features.

Physical examination of this patient is essentially negative. Besides a moderate ænemia and considerable shortage of urea, the clinical investigations yield no result.

The family history is interesting, and it was great familiarity with family traits which led me to finally associate the case as I do.

The mother is of apparently fine physique, but really

of delicate constitution, with marked vascular weakness, as shown by extreme varicose veins. On the whole of neurotic type, well controlled.

The father is, generally speaking, gouty, though his organic lesion up to this date is confined to mild degree of interstitial nephritis and a marked tendency to intestinal indigestion.

Several aunts are markedly gouty, one having distinct interstitial nephritis; one, affections of the nervous system simulating organic bulbar change; another has clearly a heart participating in arterio-sclerosis; all of them being ill, or comparatively well, according to the rigidity with which they adhere to the regime necessary to obviate their auto-intoxications.

All of these facts bear in my opinion more or less directly upon the proposition which I make in the premises. I consider that the various forms of disturbance shown by this patient are due to a common cause, and that cause a toxic agent developed in the course of digestion.

Digestion in this sense is very broad, and must cover not only the processes of gastric and intestinal digestion, but the secondary chemical changes which take place from the time of absorption by the intestinal mucosa until discharged into the hepatic veins.

To maintain this proposition does not involve the assumption or demonstration of facts. It does, however, involve analysis and comparison of clinical experience, rather broadly interpreted to be satisfied:

1. That asthmas or rheumatism of the type in question may be the result of the products of vitiated digestion.
2. That these two morbid phenomena may be the result of the same poison.
3. That the bronchitis and diarrhoea bear an essential relation to the digestive vice.

For a great while it has been customary to deal with asthma as a secondary phenomena and to regard it on the

whole as symptomatic. Most of the contention upon the point has been to class it as a reflex nervous reaction; and the primary cause has been habitually sought in distant local irritation. Though not disputing the possibility of such an asthma, I am strongly of the opinion that the morbid influence is exerted very frequently through the blood stream, bringing to the susceptible organ its intoxicant, from which arises the distinctive spasmodic response. This, to be sure, might be reflex, but not at all in the sense in which that term is usually employed.

That this toxemia is of digestive origin at times, is hard to demonstrate but of great probability. In support of this I might instance records in my possession of true asthma in children, associated with flatulence of intestines and evidence of hepatic-duodenal failure, disappearing with correction of the function of these organs. I regard such flatulence as not causative, but simply indicative of vices in digestion whose result is to load the blood with noxious material.

Or I might instance the alternating asthma and chronic diarrhoea not seldom found, in which the cessation of diarrhoea is quite likely to be associated with hepatic stoppage, and prompt recurrence of dyspnoea to be relieved by fully opening up elimination.

In such conditions I believe the checking of diarrhoea to be not a cause of asthma, but a concomitant indication of some vice of the digestive process which permits intoxication, leading in turn to asthma.

Many combinations leading to the same conclusion might be presented if in keeping with the brevity of this discussion. The conclusion is almost inevitable that asthma has at times such origin.

Can one say as confidently that the arthritis to which we refer as rheumatism may be of similar origin?

Purposely ignoring the obvious relation of vicious intestinal conditions to acute rheumatism, because of the

complicating question of possible infectiousness; and on the other side avoiding the relation of gout to toxemia, as involving a wider genesis, let us consider the freaks of occasional or accidental rheumatism.

It is a not uncommon experience to find an individual whose liberty to use alcoholics is limited by the fact that their use is followed by distinct rheumatic pain. This, by no means invariably, but only when occasioning, or at least associated with, marked digestive upset. Usually such disability does not follow at once.

Thirty-six or forty-eight hours may intervene. Is such an occurrence the result of alcoholic contact, or is it the result of secondary toxins formed in the course of a digestive lapse first induced by the alcohol? I am inclined to believe the latter. Again, observation of chronic rheumatism of certain types leads one to the conclusion that the general course of the arthritis is quite parallel with the quality of the digestive function. That this may be complex in its explanation is likely, but it serves to associate the offended joint and the digestive processes. Much might be cited to further this view, if time permitted.

Assuming the relation of the digestive process to the symptoms, are we justified in concluding that the agency is toxic rather than reflex? In support of the explanation by toxemia, let me but mention frequent occurrence of asthmatic symptoms in the form of uremic dyspnoea, gouty bronchitis, aggravated bronchial irritation from so-called "insufficient" kidneys; or, again, the repeated joint involvement in certain forms of nephritis, the painful affections of tendon and fascia incident to certain plethoric states, all of which are in their origin strictly toxic. The fact that these are essentially from "retention" toxemia, does not at all render it less probable that a direct intoxication may be operative.

As against the theory of reflex irritation lies the fact that these complications do not follow at once the digestive

disturbance as indicated to exist by other signs, but after an interval of many hours, or days.

Emphasizing this, the case under discussion furnishes a typical instance of true reflex spasm. As noted above, under certain conditions of gastric irritation, she has distressing periods of dyspnoea, with general shock, following immediately and subsiding as the stomach condition is corrected, or being relieved by such an antispasmodic as nitroglycerin.

Of the nervous reflex origin of this angio-spasm there can be little question, and its behavior is in marked contrast to the other types of spasm.

The second question, as to the identity of the poisons which produce these very different manifestations, I must be permitted to beg.

Knowing next to nothing of the physiological chemistry after absorption has commenced, and as little of the products of unsatisfactory primary digestion, it is useless to argue the point. Two statements may be made: 1, That it is not difficult to believe that one toxin may on different tissues exert various influence; 2, that the constant association of clinical forms suggests a uniformity of cause, much easier to ascribe to one morbid process recurring, than to two recurring at the same time.

The third question is as to the relationship of the diarrhoea and bronchitis to the pathologic whole. I intentionally associate them, because it strikes me that their relation to the process is much the same. Considering the long duration of both, and the fact that other evidences of disturbed digestion have been, off and on, present for years, I am inclined to regard them as eliminative efforts.

Therapeutic effort to check these symptoms invariably results, when directed to the local condition, in aggravation of the distressing features of the case, the asthma or rheumatism. Whereas correction of these conditions by attention to primary causes, as I hold them, that is by securing perfect digestion, affords relief to the entire group.

The diarrhoea, hence, in this light, must be considered rather more than a carrying off of residual matter. It must be essentially an excretory act. A question of vast interest arises at this juncture: At what point of the digestive sequence lies the fault which permits the noxious impregnation of the blood? In general two fields exist. The territory occupied by the digestion up to its complete solution of foods: the alimentary field. The other occupied by the processes of fitting the absorbed food for circulation: the portal field.

The developments of untoward character, possible in the alimentary canal as a result of defective digestive process, are many.

Does not the recognition of these and their baneful influence involve the interrogation of the portal field? Is not the portal field our natural protection when in a state of functional integrity? Whatever the alimentary attack, if effective, does it not imply that the natural barrier of the portal field is inadequate, either through failure or primary unfitness?

What should be included in the portal field in this connection? The mucous membrane of the intestine, the portal vessels, and the liver cells employed in the elaborating process.

I do not wish to take time to more than impress the importance of the intestinal mucosa. It is not just a membrane. In transit through it, food is absolutely altered in its fundamental qualities. It is *par excellence* the organ of secondary digestion. Its integrity is vital. What may be its reciprocal relations with the liver, we do not know, but in this limited area will be found an explanation of much pathology.

By these steps of indirect and comparative reasoning I have reached the conclusion previously stated as to my patient, and have reached the suspicion at least that the fundamental pathology is in the intestinal mucosa. Very many cases less complicated bear the same analysis. If

the reasoning is even approximately correct, it serves to attract attention to the futility of approaching clinical work through nomenclature. Much as I value the gift of definition, I deplore the tendency to make it in any degree explanatory. It must be purely descriptive, or it becomes a cloud.

In the foregoing comments I have endeavored to show how the familiar pictures of disease appear to me; not as entities, but as phases in the activity of a common cause; In this instance, as the reaction of various organs to a strictly toxic agent, and with widely differing morphological characteristics intimately correlated.

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MODERN METHODS OF MEDICAL INSTRUCTION

MY interest in this matter is not greater than my marvel at the enormous advance which has occurred within the short space of years, since 1880, when my medical college experience commenced. And yet, in drawing the comparison which so forcibly presents itself, I must declare that it is not to the discredit of the early day, any more than that day was a rebuke to its predecessor. I believe that you will agree with me, that medical education offered to students at that day was as nearly abreast of the education possible for them, as is our present exhibition an approach to the present possibility. The great difference in spirit which strikes me as occurring in respect to medical education in general, lies in the attitude of the public toward the profession, or, more exactly, of the State toward the medical school. In this the change is very pronounced and I believe the advancement is very clear. It is on the whole a matter for congratulation both to the schools and the profession at large, that society has seen fit to demand that we require of the medical graduates as good an education as we offer. That this change has been instigated by the profession, is to its credit and does not qualify the advantage so far as society is concerned. That the means and methods to this end have been at times unreasonable, inconvenient, and are in many respects meddlesome, is but a passing annoyance as compared with the final advantage, which resides in the fact, that while the public is properly protected the medical schools are relieved of the embarrassment of illegitimate competition, and the entire process operates as a measure whereby there is culled the unfit material.

When we come to consider our own more specific interests as educators we would designate, amongst many improvements, three features in particular which claim our earnest consideration: First, the laboratory; second, the clinic; third, the recitation.

Of the laboratory too much can not be said, little need be said. It represents the utmost development of the educational idea. To have incorporated it in our own affairs to the extent possibly of disproportionate development credits us naturally with the desire to be entirely *en rapport* with the march of education in every department.

To one who has not had the advantage of a technical laboratory training, but whose interest and ambition have led him to the acquirement of lame and half satisfying methods in furtherance of his desire for power, the idea of laboratory training is most alluring. Recognizing this, it suggests to me qualifications upon which I wish to comment. The laboratory factor is liable to over-estimate in two directions: 1, By many of those who have had no laboratory experience, to whom the revelations of the laboratory assume an exaggerated importance, in consequence of the mystery which surrounds them; and on the other hand, 2, by those whose training assures their position as laboratory experts and whose occupation is of that fortunate stripe, rare in medicine, which results in the demonstration of things. These men, for whom I have the most profound respect, naturally regard things from the laboratory standpoint, and being engrossed in it and trained to the primary idea of truth as dependent upon demonstration, are not quite prepared for the consideration of subjects which have as yet no laboratory point of view.

Many of these men have neither the inspiration for, nor the tolerance of, the field of speculative medicine, within which, however, occur those projected lines, along which the correlation of knowledge for its practical application must occur.

These two reservations are of minor significance except as considered in the light of curriculum, and serve to emphasize merely the indisputable fact, that in producing a balanced result, medical reasoners, as complementary to medical investigators, are indispensable.

Our encomium upon the laboratory can not be diminished when we take up the subject of the clinic. Here there opens before us the hope of the future. Though the clinic has always existed, it is to-day in form and in spirit quite different. The general clinic with the full amphitheater, though it remains in the form, is no longer the arena for the demonstration of the prowess, or for the personal aggrandizement, of the professor. It is solely for the purpose of bringing the student in intimate contact with conditions which are to be in the future his perplexities, and as such is capable of being made most effective. The thing, however, which we earnestly crave is the clinic for small classes, the smaller the better.

The first advantage claimed for this is that the student, being permitted to examine the patients, and required to make a diagnosis, becomes immensely strengthened. This is in a measure true, though I believe those who are teaching clinically would agree with me that even this is subordinate in importance to the fact that the interchange of thought between the students and instructors, in immediate presence of the subject, is usual, to a degree which in a large class is impossible.

I approach that which is to me at this moment of somewhat more immediate interest, the recitation.

In this innovation, we find the most signal departure from time honored method, and properly administered the most promising foundation for broad education. I repeat, properly administered, because I am positive that improperly administered it is a source of weakness. I stipulate, among many things, four which are primary to its propriety.

First, that the classes should be small, because we

accomplish thereby, in this compactness, manageability, which includes the greater facility in determining the current acquisition of the students. And second, I would stipulate that the text employed be various. It is necessary for obvious reasons to have a uniform text, designated as a skeleton upon which to build, but I am emphatic in my declaration, that students should be encouraged to seek the information preparatory to the recitation, from every available source, and that this exercise should be the meeting ground upon which should be thrown all possible side lights, and upon which should be harmonized, as far as possible, whatever apparent conflict may arise. Thus we lay the foundation for breadth of view.

I approach the third requirement with hesitancy, yet I trust even by my colleagues who are touched by this, that I shall not be misunderstood. I believe that the instructors should be men of experience, more or less according to the subject involved, but with the firm conviction that the more experienced the better. I am sure that no man is so capable of illuminating the obscure path, as one who has been lost in it.

The combination of intelligence and sympathy which results from such experience is invaluable to the teacher. To have these conditions satisfied ideally, particularly at the outset of the new regime, is impossible. To build toward them is imperative.

To this end I suggest, that every effort be made to retain in the service of the institution the men who justify their relation to it, and at every hand to so dignify their relation, that the feeling of responsibility shall reinforce the interest which may flag under neglect.

Fourth, and most important, comes the question as to the relation of the instructor to his class. Shall he be a critic whose function begins and ends with an inquisition as to the presence and industry of his students as evidenced by their ability to recite, which function I would not underrate,

or shall he be, in addition, an expounder of the subject?

That the latter should be, admits of no question.

In the first place, because medical literature is unfortunately obscure and needs intelligent presentation. In the second place, medical information is shifting and needs a current commentator for the correction of the misconceptions of the past. These facts being beyond dispute, the question simply remains, shall this important work be done by the instructors or by the professor at large, if I may use the term?

Assuming the competency of the instructor, I unhesitatingly select him for the function for two reasons: First, because with the assumed limited class one secures the psychologic advantage of man to man contact. Second, because the essence of instructive analysis is interrogation, which implies a slowness of procedure, and a quality of relationship, which is possible only in the class room.

It might be queried in the light of all this disposition of labor into the departments of subordinate instructors, What becomes of the chief faculty? Are they, in the new adjustment, mere figure-heads? I confess that in the extravagance of expression, which one sometimes hears in discussion of the new regime, it might so appear. To me the assumption of higher achievement through the working out of the processes just discussed, implies a field of usefulness for the heads of the departments enormously elevated and dignified. It is true that much of the detail of their labor is cut off. It is true that much of the prominence of a certain kind is removed, but I call your attention to these facts:

In medicine, as in no other field of research, there is at present no such thing as fixed authority. The dictum of no man is better than another's, except in so far as the depth of his research or breadth of his experience and the integrity of his reasoning process, justify it. The profession has not to deal with an accumulated mass of settled

fact. It has to deal with an enormous reservoir of knowledge, into which flow streams of more or less disconnected observation. But for every drop of fixed knowledge there is a flood of interpretation, and upon the selection of the instrument of interpretation will rest the value of the store which the student may acquire.

Is the student about to be graduated capable of being his own interpreter? Is he sufficiently in possession of the facts, and has he the perspective to enable him to wisely select the theory and adopt the practice under such conditions? Assuredly, most assuredly, not. Here, then, lies the highest prerogative of the department head.

To him let it fall to summarize knowledge, to analyze experience, to harmonize conflict. And in so far as he is fortunately possessed of personality, to so impress himself and his wisdom upon the students that he utter for their provisional guidance a working hypothesis, as indispensable here as elsewhere, which shall bear the stamp of the organic body, which launches its graduates.

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TREATMENT OF ARTERIOSCLEROSIS

IN a text book discussion of arteriosclerosis there is usually expressed a certain hopelessness in regard to therapeutic measures, which, I am frank to say, is not shared by the author of this paper. This skeptical attitude is, however, not at all extraordinary in consideration of the character of the text-book discussion of the subject which has hitherto prevailed. When the consideration of arteriosclerosis is extended past the aorta, temporals, radials, and larger arterial trunks in general, there may be some hope of incorporating it in a logical relation to disease processes the therapeutics of which are tangible. As well might one dispose of the complications of a water system which tends to occlusion, by discussing the scale in the mains; very pertinent, it is true, as to accidental bursting, but utterly worthless in an analysis of the dynamic relations of the process.

The portrayal of the ravages of arteriosclerosis in the aorta is graphic. Is the description of what occurs in the finest arterioles equally impressed? And yet, not until the subject is approached from the side of the capillary and the fine arterial twig is the remarkable symptom-complex of this affection even vaguely comprehensible. Furthermore, not until one struggles to fathom the relation between cell perversion and its nourishment, or between vitiated pabulum and tissue degeneration, or between circulatory dynamics and innervation, can he hope to establish an etiology upon which to rear therapeutics. It is not my privilege to dwell upon etiology, nor do I desire to more than allude to classification. All treatment must find its reason in consideration of three general factors:

1. The cell and its natural endowment.

2. The character of the supply from which the tissue derives its support.

3. The controlling influence which determines its nutrition and functional activity.

Great was the day of cellular pathology. Greater is this day of investigation of morbid-cell physiology, the natural exponent of morbid anatomy. The endowment of the cell is the resultant of its inheritance and its adaptation to environment, coöperative or antagonistic, as the case may be; the management of its difficulties must involve the just estimate of these factors. That the cell has a morbid physiology long before there is demonstrable organic change, admits of no question. To determine the elements of this malfeasance is the task of the future. Inseparable from this problem is the consideration of the vital experience of tissue as determined by the nutrient current to which it is exposed. Hence, we come to regard as a determining influence in morbid development the vitiated blood supply which reaches the part. Thus does cell pathology reach back into the darkness and lead forth, for its own elucidation, a new and enlightened humoral pathology.

To deal with arteriicapillary fibrosis in respect to innervation is a most venturesome undertaking. Of the facts in question we know nearly nothing. Analogy, however, and clinical observation compel the conclusion that the relationship is pronounced; on the one hand trophic influence, and on the other, functional control, combine to furnish the activities which finally develop the defects resulting from the malnutrition above suggested.

The treatment of arteriosclerosis, or, as more suggestively called by Gull, arteriicapillary fibrosis, should be regarded from various standpoints. Unquestionably, the better knowledge of the process which the future has in store will admit of great advance in prophylaxis. The process once established demands relief, for one or both of two reasons: Either because of general disability, or

because of special predominance in organs which demand specific consideration. It is not too trite to repeat that "a man is as old as his arteries." No relative estimate of age compares with this. It implies that arterial degeneration is the physiologic index of decadence. It becomes a pathologic condition when it anticipates years, or what is the same thing, exceeds the reasonable expectancy of a given period. Whatever conditions contribute to this maladjustment and the possibilities of modifying them, determine treatment. As a rule, before the arterial degeneration affords distinct symptoms there is evidence of the toxemia that is behind it. The character of the toxemia varies. It is the result of poisons ingested, or infection, or auto-intoxication. Of the first two, as of plumbism or syphilis, little may be said; their therapeutics are well defined. Of the third, much must be said, inasmuch as it includes the greater number of all cases. The common factor in the various types appears to be defective food metabolism. The active agency inducing this defect varies. We find it in the overfed and in the underfed; in the inactive and in the over-active; in the young, middle-aged, and old. In its earlier stages it usually is associated with good digestion; rarely with dyspepsia. It is a post-digestive development. The most constant factor in a series of cases is evidence of incomplete disposal of nitrogenized materials.

Chemically, we determine this by the defective excretion of urea. This means lessened manufacture of urea, or faulty separation of urea, or both. Clinically, we detect the condition in symptoms of nitrogenous intoxication, the so-called uric-acid manifestations. It is by these that our attention is primarily attracted, and in this analysis we are enabled to early demonstrate arterial change. That the true toxin is uric acid is doubtful. That the poisonous agents generated in this way are several is highly probable, but philosophy must reach far ahead of our full knowledge

and outline the probable. These facts are not asserted as ultimate. Unless lightly held as provisional data they are likely to mislead. They do, however, furnish the clinical characteristics, more or less demonstrable, which serve as a basis for the conclusion that the essential agency in this process is toxic, and for the most part autotoxic. The treatment at this stage of the disease is essentially hygienic. The initial proposition is how to adapt the individual to his environment. In general the elements of food and physical expenditure are at fault. The important requirement is that food should be adequately introduced and thoroughly eliminated when no longer useful. Decided failure in either direction is destructive. For any given individual, "Is his food adapted to his work?" should be asked. To meet this query what do you demand? That his eliminating organs yield the proper representation of his ingesta. You see at once that our diagnostic resources do not cover such elaborate investigation, and yet we are not without resources.

Clinically we have well recognized evidences of toxemia by which to measure condition. Believing that the toxic agents are nitrogenous, we have approximate means in the estimation of urea and total nitrogens excreted with the urine. Marked departure of these from the standard average of health demands explanation and correction. So far as our present knowledge goes, it points to defective combustion as the efficient cause of these conditions. At once this opens the most complicated questions of relative combustibility of foods. Into this we can not enter. Sufficient to say, that quantity is quite as important as quality.

Given a good digestion, a mixed diet may be right or wrong, according to the quantity. The "rendering" capacities of the body have definite limitations, and react accordingly. Clinically we encounter, as a rule, the necessity to diminish the nitrogenous food, or to change the form of its

use. That the struggle against this gradual toxemia may be more successfully waged by attention to this line of procedure, I have not the least doubt. Practically, it amounts to the gradual adoption of a mixed milk and vegetable diet, and experience fully warrants the advocacy thereof. It is remarkable how broadly applicable this simple regulation may be. Alone, it frequently is the efficient means of correcting the phenomena associated with this pathologic state. Of these may be mentioned nervousness, sleeplessness, shortness of breath, faintness, and a number of allied conditions, dependent for their causation upon the interplay between a toxic blood and pathologically limited capillary distribution.

It is true that the arteriicapillary limitation may be complex, in fact, usually is; that in addition to structural encroachment upon the blood vessels, there is usually muscular over-action—spasm, if you like—in the arteriole wall; that the result is a raising of general blood pressure by the participation of these elements in various degrees. Attention should be directed in this connection to the distinction between arterial pressure and arterial rigidity. Associated as a rule, they may be far apart. It is not rare to find a great arteriosclerosis with arterial rigidity widespread, together with a dangerously low blood pressure. Of the complication so arising we shall say a word later. The important question is: To what extent may the mischief of heightened arterial pressure be avoided by attention to this nerve reaction? In response, I adduce as the next measure of treatment, and not second in importance, the adoption of an even, equable life. It ought not to require a demonstration, into which we can not now enter, to show how vital is the principle involved in this question.

All of the life influences which tend to exhaustion, incoördination, and perverted nerve control, range themselves upon the one hand; all of the forces residing in deliberate, coherent, even though forceful activities, oppose

themselves — to the end that it lies within reasonable demonstration that the poise of life is fully as determinative of its physical destiny as are the factors which we are superficially in the habit of regarding as crucial. When we come to consider more specific pathology, and search for indications for treatment less general, we find that the occasion arises in connection with organic change in many vital organs. Three distinct relations between special organic change and general sclerosis are possible, and frequently coexist. The special change in an organ may be a direct consequence of the general process; or it may be a part of the general process, that is to say, participating; or it may be in a measure causative of the general process. Without pausing to discuss these relationships, it is possible to state that the clinical phenomena bear a constant relation to intra-arterial pressure.

Of these the most prominent are hypertrophy of the heart and polyuria; the heart hypertrophy occurring as a truly conservative process in response to enforced labor; the polyuria, occurring *pari passu* with the sclerosis in the kidneys, becomes an equally compensatory event. In so far as these conditions maintain a due relation, little can be done to alter them. It is at the point of failure upon one side or another that interference becomes necessary. If, for example, the heart hypertrophy begins to yield to its excess, and the *vis a tergo* is withdrawn, the effect upon circulatory conditions becomes enormously exaggerated. This exaggeration follows the fact that in the typical condition resistance in the capillary area has been met by increased force of the heart, with the result of creating an intra-arterial pressure sufficient to maintain the circulation. Withdraw even slightly the heart power, and you have left all the resistance resulting from altered caliber minus the blood pressure; hence, ensues stagnation quite out of proportion to the amount of heart failure involved.

The result of these changes upon the function of the

kidney is in all cases pronounced. The immediate effect is to reduce the bulk of the urine. At the same time, the solid excreta of the urine fall short and there supervenes a more or less intense uremia. Almost the same description will apply to circumstances in which the blood pressure has been suddenly reduced from other causes. The chain of serious consequences is finally chargeable to undue disturbance of a blood pressure which has become quasi-normal.

It is important to estimate these phenomena at their true value. The therapeutics follow absolutely this analysis. The indications for treatment are two: To restore the balance between impelling power and resistance, and usually, to protect the interests of organs which have grown dependent upon an altered pressure. Therefore, it will not do, even if possible, to bring down the peripheral resistance to the capacity of the heart; the pressure must be restored, and hence the invariable rule: When the subject with arteriosclerosis begins to fail in the maintenance of the new balance, as a primary move, conserve the energies to the utmost by reducing expenditure in every direction. Hence, put the patient in bed. Regarding the tendency to toxemic complications as most threatening, it becomes imperative to reduce the problem of nourishment to its simplest terms; that is, to the point at which the system most nearly protects itself from toxic accumulations. Hence, reduce the diet, perhaps to consist simply of milk. Promote the interchange of fluids in the tissues, bringing fresh materials and carrying away effete, by means of baths and massage. Secure the highest possible functional perfection in the organs whose efforts control food and tissue metabolism, particularly the liver, by the small and long continued administration of calomel; thereby contributing in the highest degree to the final and indispensable demand, namely, that elimination be not allowed to flag.

In the kidney we encounter the most serious obstacles. An organ, primarily or secondarily cirrhotic, dependent

upon a high blood pressure, finds itself choked by these conditions. It must be relieved. To this end the following measures may be instituted: In the absence of great edema provide sufficient fluid ingesta. Restore the equilibrium of the circulation, to accomplish which administer strychnin, for its benefit to the heart, and digitalis, for its effect upon the peripheral arterioles. Recall the fact that digitalis may not be indefinitely used in these conditions without resulting damage; but remember also, that in an emergency like this, it is indispensable.

In thus touching here and there a salient point of this subject, I have striven to keep in mind the fact that the efficient treatment of the degeneration in question lies in prevention.

To know the signs of the predegenerative state, and forestall them, is the highest usefulness of the physician. Once the disease is well established, the treatment becomes a treatment of complications and emergencies. Thoroughly investigated in the beginning, the therapeutic possibilities are far more gratifying.

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TREATMENT OF ACUTE RHEUMATISM

THE task of discussing the treatment of acute articular rheumatism, as a climax to this exhaustive discourse, is inevitably rather thankless. Decided convictions as to the successful and satisfactory therapy, I have not. Too many times has experience contradicted and reversed previous conclusions to permit me to hold dogmatically to lines of procedure at all inflexible. Too thoroughly ground in upon me are the doubts and disappointments of clinicians, to allow me to harbor the hope of authoritative routine.

What I have to offer is a tentative and provisional interpretation of accumulated experience, which seeks to harmonize obvious conflicts in the line of advance of investigations in this field. The history of the subject is full of interest. The frequency of occurrence and ease of diagnosis have made this an inviting field for therapeutic measures. The consequences have, as usual in such circumstances, been more or less disastrous. The number of plans and agents which have traversed the scale from favor to disfavor must create the impression that treatment has been in the past unsatisfactory. That such is the fact, the therapeutic nihilism of many close observers abundantly evinces. The subject, however, is not for such reasons barren.

Without undertaking to deal with the detail of development of this subject, I wish to refer to the various points of view heretofore held, and to comment on the tendencies of treatment following such outlook.

With noticeable uniformity the more or less imperfect groupings of symptoms which have been called rheumatism have been attributed to altered conditions of the blood. The conception of constitutional character is quite likely most natural; in view of the clinic behavior of the disease,

it would indeed be very difficult to long regard it as local.

Morbific influence generally located in the blood has been accepted as at least a fixed factor in etiology. The genesis of the morbid material will afford endless discussion.

Only so far as it underlies therapeutics need I enter that territory. The earlier history of treatment shows at various times divers theories as to the nature of the poison. Removal, neutralization, or antagonism of the morbid substance distinguished the serial steps in the evolution of treatment.

Almost uniformly before about 1860, the measures of treatment were depurative: Bleeding, catharsis, diaphoresis, emesis, blistering. Each of these measures has abundant testimony to show its value at some point. The grand result, however, as viewed from this distance, must be regarded as at least questionable. On the whole, I believe patients were better untreated.

The next advance in practice is marked by the utterance of the lactic acid theory, whose corollary was the alkaline plan of neutralization. Upon this territory therapeutics rested for a considerable period, and with distinct advantage and permanent improvement in method. It must be said, however, that the acid theory has not been substantiated, and that the general improvement in results must have another explanation than that implied at its adoption.

Then ensued the period influenced by Trousseau, as usual, most observant and sound. His dicta are to-day cardinal: "No case should be treated upon a predetermined routine." "Avoid congestions of the encephalon." "Beware the anemia which follows overuse of alkalies."

Then followed the period in which Flint was the conspicuous light. Close judicial observations of the natural history of the process without treatment, conducted by him, served to abruptly correct the theories of specifics. His conclusions are fundamental as a basis of comparison of various medicinal plans.

Soon followed the introduction of the salicyl element in various forms. In this was great promise, and its early history was such as to encourage the hope for a specific. That this hope has not been fulfilled does not belittle its value nor gainsay the fact that it, of all the drugs at our command, is the most efficient.

That the obviously imperfect compass of these theories may still within its limits have been sound, we can not dispute. The scope of such views is too limited to harmonize with advancing knowledge, and the deeper levels of causation must be explored. The more intricate reactions of physiology and biology will of necessity be invoked to clear up this obscurity. We are not materially nearer to a determining cause than our predecessors, but the lines upon which our progress will occur are better determined and the points in controversy more defined.

Have we to deal with a local or general condition? Mere multiplicity of lesions does not settle that point, nor do the whimsical shifts of site. The preceding essays, however, have clearly set forth the reasons for regarding it as constitutional. Next, is it septic or toxic? If toxic, is it from invaders, or is it autotoxic? In this field controversy must occur, and the issue can not fail to be momentous, especially as bearing on treatment. We must sharply discriminate between true sepsis, the manifestation of pathogenic germs in the tissues, and intoxication as an absorption from septic development in the intestinal tract, or other external site. And again, we must sharply discriminate between toxins from such infective sources, and toxins of metabolic origin.

The territory which must be examined to clear this obscurity is broad. We have little demonstrated knowledge upon which to found a pathology. Analogy and inferential conclusions are, on the whole, strong, and our views of the process are not seriously discordant with the past.

A comprehensive view of this subject involves various postulates. To begin with, rheumatism is not of necessity arthritis. A glance at clinic manifestations of childhood makes that evident. Endocarditis, chorea, and arthritis are the trilogy of the rheumatic picture in youth, and in that relative order of frequency. It is not competent for me to here contend for this, as it seems to me, clear association of clinic conditions.

Could anything more strikingly illustrate the complexity of the problem of treatment? What have these in common, and where is the point of divergence which determines their various aspects?

Is it not a mistake to regard them as sequential? Is either especially the lesion of rheumatism? Are they not all clear expressions of the rheumatic state, infection, or intoxication, the determining factor of whose morphology has not been made apparent?

It is difficult to separate and clearly define the various rheumatisms. Whereas the typic examples are well enough defined, the shadings and graduations, especially in the joint manifestations of the adult, are by no means simple of distinction. It seems to me it must be recognized that a certain kinship exists between the arthritis of acute rheumatism, and the various forms of chronic and recurrent joint and muscle morbidity, whose classification will range from subacute muscular rheumatism to typic gout. What this kinship is may well receive our attention.

How the characteristics common to the class become modified to present acute articular rheumatism, is the question for whose solution is awaiting the true therapy of rheumatism.

One need not cite too extensively the common features. Let us but consider the uniformity with which the group is associated, on the one hand with gastro-intestinal vice, and on the other with hepatic default. That there is a more or less definite association of type with each of these

visceral conditions, I believe, but that is here beside the question. Is it sound to recognize the association, and may we consider the sequential, if not the causal, relation established?

My belief in this would constitute my second postulate. I recognize the relation as one of intoxication, either derived from the intestine, by absorption of noxious products there developed, which process should be called autotoxic, or an intoxication engendered in the process of defective transformations of food after absorption, especially in consequence of hepatic failure, which I would distinguish as metabolic. Upon this broad territory we find arranged the changeable pictures of joint, muscle, and nerve maladies, and from this foundation we may erect specific structures of disease, which result from the introduction of one or many new etiologic factors.

It is forced upon us that the behavior of acute rheumatism is like that of the other infections. All new light seems to emphasize that view. Nevertheless, the underlying conditions of autogenetic intoxication must be recognized as of fully coördinate influence. I dwell upon this, because I consider that it is the side of the problem to which the therapeutics can bring some measure of correction. To be sure, the same relation may be assumed in some degree as to other infections, but by no means with the same directness. The clinic relationships in the rheumatic group are striking. Take, for example, tonsillitis, for the moment not questioning as to its exact type. Assume, if you like, as is argued, that it is the gateway of infection that may determine rheumatism. Is it not always associated with a pronounced biliousness, and is not biliousness a pre-existing intoxication? Though difficult to demonstrate, I am disposed to think that the line between tonsillitis and an attack of rheumatism may be determined by the relief of the biliousness, hence my emphasis of the underlying toxic state.

In the early stage of acute arthritis, the prime consideration is the relief of pain. The graphic description given in the earlier part of this discussion (see *Journal*, pp. 304 *et seq.*) can but demonstrate the destructive effect of this process upon the nerve centers. The logic point of therapeutics, however, is elimination. I have no doubt as to the influence upon duration and complications of depurative measures. Fortunately, the efficiency of our most valuable drug is in both of these directions.

The salicyl element, particularly in the salicylate of soda, is, in rheumatism, par excellence, an analgesic. In many conditions besides rheumatism it is a pronounced eliminant. Is not its superiority over other analgesics due to this fact? I can not accept the theory that it acts in rheumatism as an antiseptic. I am inclined to think that its especial value, over, for example, the coal-tar group, lies in its influence upon destructive metabolism, the promotion of which must underlie elimination. Thus is grounded my belief in salicylate of soda in the early stages of rheumatism, given in profusion while necessary to relieve pain; more moderately when the effect is directed toward elimination; but given to its effect, almost without regard to dosage, though for brief periods. Its heroic pressure for long periods has properly fallen into disfavor.

What can be considered a limit as to amount is hard to say. One to three drams, however, in twenty-four hours, is perhaps a fair statement. This limit is determined by the relief of pain. Other analgesics will occasionally answer. I have seen the pain of acute rheumatism cut short by a single dose of antipyrin. As a rule, the coal-tars are a disappointment, and not safe in large quantities. Exceptionally, both the salicylates and coal-tar products are not well borne, especially by reason of cerebral manifestations, which are disquieting. Under such circumstances pain must be relieved, and if necessary by opium in some form. Pain, however, may be much palliated at

times by local attention; warmth, counter-irritation, immobilization are, singly or combined, indicated.

Whether to irritate by blister, liniment, or cautery, will depend upon the type of the case in hand, though generally speaking, the cautery is most efficient. It is, on the whole, not often that such measures are necessary. Warmth to the parts involved, and reasonable attention to the general warmth of the patient, must be regarded as indispensable. So far as I am informed, the new process of extreme dry heat is not of value in acute febrile conditions.

As a rule, immobilization of a joint, even in the acute stage, will afford appreciable relief. Plaster of Paris is our best agent, because of its permanence and cleanliness, though not at all times practicable. Being not a familiar resort, its use in such circumstances is rather slow of adoption, but its value is undoubted.

Much of the acute rheumatism has not severe pain, and in most cases it is relieved within a few days. The conditions then become asthenic and pursue a tedious course, wherein the bodily depression is gradually augmented by an anemia of toxic origin, while the local manifestations are likely to be complicated by more or less trophic change. From this point the treatment is full of perplexity. The insidious effects of the specific toxemia become indistinguishable from the autotoxemia, which I regard as more or less constant.

The low fever, the grumbling joints, the deteriorated blood form a familiar picture to which are added various irregular manifestations of toxemia, as urticaria, erythema, renal complications, etc., and not infrequently at this stage an outbreak of the disease afresh, in the heart. What to do as these phases pass along, to prevent or mitigate the dangers which we know to exist, is always a problem. Intestinal foulness is a constant feature of this stage; hepatic torpor is an important factor in determining this foulness.

Elimination is the watchword, by skin, kidneys, intestines, and by liver. Not only must no avoidable accumulation be permitted, but the activity of the emunctories must be invited.

It is during this period of intoxication without pain that the alkaline treatment becomes most useful. Why, I can not say. Unquestionably, it promotes *final* excretion. To what extent does it promote the processes which necessarily preceded excretion? The value of alkalis in many toxemias, even those strictly of metabolic origin, is well known. That this value lies in the neutralization of acid, is open to doubt; that its influence is in promoting elimination, can not be made clear. But there is no doubt of its value, given boldly in many conditions of the later stages of the disease. It is possible to abuse the method. Trousseau pointed out the objectionable anemia which too much alkali induces. The use of alkalies should not be uninterrupted, nor should the current blood state be ignored. Along this line, also, the phosphate of sodium is of use. Given in dram doses in plenty of hot water, its customary influence upon the liver, and the general improvement in intestinal conditions, are most effective in certain cases.

Mercurials, which were the standby of our forefathers, are on the whole not satisfactory. If given, however, my experience would lead me to prefer occasional pronounced effects, rather than the sustained effect which I seek in other conditions.

Of all questions involved in the therapeutics of rheumatism, the greatest is: Can we influence by treatment the tendency to the development of grave complications, particularly in the endocardium? My personal observation does not lead me to a conclusion on this point. My hospital experience does, however, lead me to great distrust of the conclusions deduced from the hospital records, commonly cited in this argument. I need hardly emphasize the great inaccuracy of such data in general. Hence, the

statistic presentation of the case, which is not only discordant, but presents upon each side variations of a small percentage, I am not at all disposed to be guided by. Able men declare that the heart development is less likely under the salicylates. As able men also declare the alkalies have the same protective power.

Logically, if the rheumatic poison, no matter what its source, is at all antagonized by either of these plans, the endocarditis and pericarditis, which are not complications, but coördinate developments of the disease, will be influenced by either in proportion to its efficacy. Personally, I believe:

1. That the selection of remedies should not be by routine, but according to the type presented.
2. That the cases will be appropriate for one or the other treatment.
3. That the cases with pain are best started upon the salicyl treatment.
4. That most cases are better, after the subsidence of pain, upon an alkaline treatment.
5. That the usual plan, recognizing the value of both salicin and alkali, of combining them in treatment, has the disadvantage of exhausting one's resources, as neither should be continued indefinitely.

When the heart complications do occur, the plan of procedure is not usually materially modified. The indication is for quiet. Bodily quiet, cardiac sedatives, vascular relaxation, constitute our indication.

Morphia and aconite are the best and safest cardiac sedatives. Veratrin is very valuable, but very potent. These, when exhibited, usually provide all the vascular relaxation necessary. However, at times more is needed. Carbonate of ammonium, iodid of potassium, nitroglycerin, are all of great service in reducing blood pressure, and hence their favorable effect upon the circulation, too often regarded as heart stimulation.

The tendency occasionally manifested to congestion of the encephalon must be regarded. Long ago, Trousseau argued against quinine on this ground. Later it has come to be rather accepted that the salicylates must have similar restriction. General principles apply. We all hesitate to further congest a smouldering encephalon. The nerve manifestations are our only guide. These may mislead, but we have no better.

If the symptoms be interpreted as indicative of cerebral irritation, the salicylates should give way to the alkalies.

A mild grade of nephritis is very common in the course of rheumatism. It is rare that it is significant, in its recent development, but its treatment should be, if possible, alkaline.

Frequently cutaneous eruptions come and go in the course of the disease. They need perhaps no treatment, but the effect of treatment upon them ought to be instructive as bearing upon the coexisting toxemia. For example, one sees occasionally repeated crops of hives. It is not without its significance, that the same remedy that is efficacious in general is also so here.

Pilocarpin is almost a specific for this condition. May it not be that this stimulation of pancreas has a more than casual importance in this question? I am disposed to think it is another item of value in the determining of the part played by intestinal vices.

Concerning dietetics, I care to say little. When one has taken into consideration the peculiarities of the intestinal and hepatic conditions that may be present, and has attempted to proceed in accordance with the general proposition that infectious processes are usually overfed, he finds himself reduced to a milk and farinaceous diet, and, I believe, on the whole more safely so. That more elaborate methods become necessary in the recuperation is hardly for me to discuss.

There is no doubt that the treatment of rheumatism is

to only a very limited degree curative, though abundantly palliative. The average duration has not been materially affected by any so-called plan.

This does not warrant inactivity in the premises. Skillful use of the means at hand is imperative. It is incumbent upon one to know their various relations, and then to adopt as a guiding principle Trousseau's rule: "No case should be treated by predetermined routine."

Right in the face of this sage advice, and while accepting it fully, I venture to outline a routine, which I would apply to a typic case. Inasmuch as one may never see a typic case, the stultification may not be so great.

1. Empty the bowels thoroughly, preferably with a sharp mercurial.

2. Administer salicylate of soda to its full analgesic effect; if it is not well borne by the stomach, its equivalent, oil of wintergreen. If it is contra-indicated by cerebral conditions, use antipyrin, or the coal-tar preparation best adapted. If these are contra-indicated, by condition of the heart or nervous system, use opium. At all events control pain.

3. As the pain is controlled by such means, aided by local measures, particularly heat and immobilization, gradually draw away the salicylate element and saturate the system with alkali, continued until the active process seems controlled.

4. Finally, while giving alkali, or after it, administer iron, providing the conditions of bowels and liver permit.

5. At all times, and incessantly, strive to promote intestinal hygiene, by mercurial, cholagogue, or saline, with the conviction that upon the processes here represented the disease, its duration, and complications largely depend.

Impatience with the tediousness of the course, leading to ill-considered and premature activity, must be avoided.

The most discouraging behavior will swing around into satisfactory convalescence, often in the briefest period.

One may well question whether his efforts have, to any considerable degree, influenced the course. When one considers the relief of suffering in the acute stages; the specific measures of treatment appropriate to the heart conditions; and finally, if he shares the view that the general toxemia is an important element, and more or less amenable to corrective measures, he will, I think, be satisfied that there is abundant scope for his most discriminating judgment.

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THE RATIONAL DIAGNOSIS

I OFFER no apology for bringing to your attention an address which suggests in its title a speculative cast.

In this day of clamorous facts and urgent needs of practical processes, we have little time to spare for theoretical disquisition. We may be fundamentally scholastic, but the demand of to-day is that we utilize our knowledge. In full recognition of these facts, I emphasize the proposition that never was there so much material nor scope for medical reasoning as at this moment.

It is hardly necessary to point to the array of forces which have to be marshaled to effective power. Centuries of clinical experience, descriptive observation, and empiric procedure have poured forth their contribution to the cause of humanity. Hardly a score of years have sufficed to put this mass of medical knowledge into vibration, whose only end must be readjustment and harmonizing of data. Great as is the marvel of the new era, greater is the marvel in the rapidity and eagerness with which medical minds have grasped the truth and molded themselves to its teaching, though it be subversive of every preconception and destructive of accumulated formulæ.

Nothing, however, is lost; every fixed relation, every established law, all the contributions of our predecessors, more or less misinterpreted, are the material out of which to rear the structure of scientific medicine under the illumination of modern thought.

No other field offers the wealth of opportunity here to be found. No period in its history compares, in its fruitfulness, with the present.

Like all revolutions, the activity of the last few years

has affected the whole structure of medicine. New pathologic knowledge suggests an ultimate physiology whose intricate reactions constitute the presentation of morbid relations, which we apprehend and arrange into form and the true significance of which we may grasp, and achieve thereby, a *diagnosis*.

The fundamental relation of pathology to diagnosis is well established. It has been indispensable to the systematizing of knowledge. But its groundwork is after all morbid anatomy, and that is no longer a final step in the path to causation. Morbid physiology underlies morbid anatomy, precedes it, determines it, and, as its elements are made clear, coördinates divers morphological entities in a common genesis. In the contemplation of scientific medicine these propositions are granted and present little difficulty. It is to the greater field of application that I direct your attention.

It is, on the whole, a deeper intellectual task to bring into harmonious relation the dicta of science and the practice of physic than to discover the wonders of the laboratory. The reasons for this are practically to be found in the nomenclature growing out of it. We have dwelt in the contemplation of organs and their changes. We have designated structural alterations by specific terms and have divided and subdivided such presentation to their finest distinction. Finally, we have sought the origin of these changes in the altered condition of the elemental unit, the cell, and have raised a classification upon the strictly true and logical hypothesis that morbid anatomy is primarily cellular. More than this, we have too much allowed ourselves to consider disease manifestations as single and capable of existing in local relation, ignoring the complete interaction of bodily parts. Hence, we have outlined and reasonably classified the gross and histologic departures from the normal, to which we apply the names which we call diseases, and have, up to that point, utterly failed of the grounding of a diagnosis.

All of this well-worked material demands another step. The finer our classification the greater the need, because the more immediate the application of a reason for cell perversion. Our advance can no longer be anatomic—we cannot get our solution from the study of structure, however important and enlightening. We have no recourse but the study of *Process*, and out of that we must derive the origin of disease. The limitations of our knowledge will cause us to fall far short of final solution, but the status of the work is established in this newer territory, and this path it must traverse.

Consider, for example, the general aspect of infection. Surgically, it has long since come to pass that disease pictures are regarded as elaborations of septic possibilities, occurring under more or less known conditions. The site of infection, the structural peculiarities, even the organ involved, are subordinate to the type of the infection, as manifested in its own development. Morphologically identical agents, under conditions indistinguishable, produce the widest divergence of results. The physiology of the micro-organism is the standard of its power, and the results of its implantation are regarded as the strife of biologic antagonists affecting the whole economy, rather than as organic disease or default to which the infective agency is incidental.

In medicine this simplicity of view is not so established. We talk of tonsillitis, of diphtheria, of croup and otitis media, of cystitis and metritis, of pneumonia and meningitis, maintaining all the time, to a large extent, the anatomic relation instead of the infective. Reflect, for example, upon the fact that much of the tonsillitis, otitis, pulmonitis, phlebitis, meningitis is due to pneumococcus infection. Reflect further that this same group of *words*, which are too often regarded as the designations of disease, are used to cover a series of morbid conditions caused by the streptococcus; that the clinical designation of diphtheria has

lost its value because experience and demonstrations show that, except in exaggerated cases, the clinical diagnosis cannot be made, and a series of similar-looking cases may be infections with streptococcus, pneumococcus, gripe or true diphtheria.

Similarly the important territory of the bladder and uterus is subject to infection whose character and importance is determinable only by recognition of the type. Still we talk of cystitis and metritis.

Upon the basis of this anatomic diagnosis lend me your aid in selecting a reliable and permanent diagnosis for a patient whom I now have who had in sequence tonsillitis, bronchitis, meningitis, pneumonia (right), crural phlebitis, pneumonia (left), crural phlebitis of the opposite side, pneumonia again, empyema, abortion—all but the last two demonstrably of pneumococcus origin. Is it not perfectly clear that we must take a different point of view, both as to site of morbid anatomy and as to the significance of symptoms? Must we not recognize general pneumococcus infection, accidentally located, with toxic symptoms?

So with otitis, leading to meningitis, enteritis or any of its so-called complications. We can neither dispose of such conditions by anatomic description nor at all grasp their clinical importance and behavior, without a broader point of view. Under these circumstances the use of the term tonsillitis, follicular tonsillitis, and all the rest, is but a provisional measure while we await better things, but it is imperative that we become *at once* and permanently dissatisfied with the method, and see clearly the way out, which is in distinguishing by some means the characteristic feature; adopting the habit of regarding all such things as infections of definite type; and demanding of ourselves that we determine the infective agent before we lay claim to a diagnosis, and in the event of incomplete facilities for such diagnosis that we admit the lapse in our process, while striving to identify our disease by all positive means.

Let us concede, if necessary, that the ultimate diagnosis now possible, owing to the technique involved, is not practicable for all practitioners. The facts are in no wise altered thereby, nor need the lack of the final step make the preceding less possible and intelligent. In fact, it is to the general recognition of the facts, acquired with the help of the microscope and test tube, that we must look for an accumulation of clinical data which shall make differential diagnosis possible without such technical means. The result, however, hinges upon the clear comprehension of the fundamental relation.

Let us glance at the broad class of intoxications occurring outside of the tissues, though within the body, as for example in the gastro-intestinal tract. To such poisonings I will limit the term auto-intoxication.

Existing as primary or accompanying states, they are capable of inducing manifold indirect results, whose description, even at this day, is prone to be based upon organic, accidental expression, covered by a name, for the most part, not suggestive of the etiology.

In such relations stand much of the bronchitis, arthritis, enteritis, asthma, vasomotor irregularities, and nerve manifestations, as in headache, or neuralgia, or heart irregularities. It is not uncommon to have several of these allied conditions coexisting, or alternating in the same individual.

How long shall we continue to regard them as entities, ignoring their dependence upon absorption of toxins, or toxic irritation of local surface, with reflex development variously distributed?

Passing to a third group of conditions, I believe we may find infinite interest in tracing the kinship that exists between a multitude of now-called diseases, whose common genesis is also intoxication, but as a result of perverted or defective metabolism.

This group is the more interesting, as the more

important, because it nearly represents the essential or vital possibilities — often hereditary — of the individual; not infrequently presents from birth to age a consistent series of totally unlike phenomena, which are, nevertheless, expressions of the same disturbance, modified in form by age; and often is represented through family connection by occurrences which have no suggestion of likeness, except in their relation to a common factor. I have in mind the following family history of an aged lady now in my care: A brother died at 50 of apoplexy; (2) another brother at 54 of interstitial nephritis; (3) a sister suddenly at 60, supposedly of coronary sclerosis; (4) another sister of intercurrent disease at 65, having had post-apoplectic paralysis; (5) a brother at about 70, of senile dementia; (6) another brother at about the same age, of senile gangrene of the extremities; while the surviving sister has mild nephritis, with periods of bronchial inflammation, due to the varying toxæmia associated with an altered bronchial mucosa. The identity of process in these seven persons is striking. The anatomical condition in each, arterial degeneration; in two weakening, in two occlusive, in two destructive of organic structure and function, and one yet to be determined, though in prospect toxic. But the kernel of the matter is in the *cause* of the arterial changes, and that is to be sought in the defects of chemic change occurring through a long series of years, perhaps from birth. The importance of heredity in this group is great.

We see the gouty proclivities of the parents portrayed in the eczema of the babe; the bilious attacks of the child; the periodic attacks of the youth; the neuralgic and rheumatic developments of maturity; and the insidious deteriorations of vital organs more or less prematurely developed, which we meet with surprise and call Bright's disease, or heart disease, or brain disease.

While we recognize that physiologic trend is as hereditary as form, and consequently very fixed, we must recall

that all of this can originate *de novo*. Hence the question is, not what is the form or location of this disease, but what is the *process* from which it originates; and further the question,—To what extent is this process a constant factor in the life history of this individual?

Consider a fourth group. The ductless glands, or, somewhat more broadly, the interior secretions, so-called.

What we do not know about these secretions and their value in the economy should not be allowed to discourage us in an effort to arrange what we do know. Latterly we have come to know a good deal. We know that many of them are of vital importance. We may assume that all are more or less so.

We have come to know of some, as the thyroid, that its function is closely associated with some diseases so-called, so of the suprarenal capsule, so of the spleen—not as organs of assimilation, nor as participants in general metabolism, but as furnishing distinct contributions—secretions, if you like—to the body, for purposes yet known to us only in their miscarrying.

We feel reasonably sure that certain abeyance of function in the adrenals will induce—or is it, *permit*?—Addison's disease. If it is so potent in its withdrawal, what shall we argue as to its influence if it be present in excess? Can we conclude there is no excess? Is it conceivable that it can be so one-sided? As yet, upon this we have no light.

Somewhat clearer is our light upon the thyroid gland. We may say we know that withdrawal of thyroid influence (secretion) beyond a certain point will result in myxoedema. We have a well-marked, unmistakable picture that is typical of this process.

Where does myxoedema commence? How long a period of gradual change before one recognizes the difficulty? What do we call all the stages of the difficulty before the final picture? Certainly there must be conditions dependent upon partial, or lessened influence of thyroid, long before

the typical results are suggested. I contend that whether we may recognize it or not, there is a sequence of conditions more or less morbid which represent the various degrees of thyroid lack.

Does not our diagnosis hang upon such close discernments?

Let us take the obverse picture, the typical condition dependent upon over-influence of the thyroid, exophthalmic goiter.

We know well the fully developed aspect. Do we realize as fully the pathway toward that full result along which we may expect to find a multitude of cases whose sufferings are otherwise inexplicable?

These two extreme conditions of bodily perversion, presenting the utmost contrast both of form and function, reasonably well demonstrated to be due to under-thyroidation or over-thyroidation, respectively, afford the most suggestive text along the line which I suggest. If these extremes exist, *a priori* reasoning, as well as abundant clinical experience, will declare that gradations exist between. Such I believe to be the fact. If true of thyroid influence, is it not probably true of the other internal secretions?

May we not hope to add to the terms, hyperthyroidation and subthyroidation, other terms equally comprehensive?

The time has come for estimating disease as an expression of the whole, in response to a morbid influence. If the local features become of importance, accord them their rightful attention, but let us struggle against the folly of regarding a hypertrophied nasal mucosa as explanatory of hay fever, or catarrhal uterine mucosa as of different significance from other catarrh, or either as independent of constitutional conditions.

We have much to learn, even in the simple field of symptomatology. Our grasp of significant phenomena is in a measure weakened by the strong current toward technical methods. I suspect we have decidedly retrogressed from

the symptom reading of our predecessors, and that we are not as incessantly building our vast materials into usable forms as the time and opportunity demand.

A fixed symptom is a boon: not that we want fixed rules for diagnosis, but we want knowledge of relative weight and proportion, so that the path may be blazed without diversion and be followed with confidence.

It is not necessary in a given case that I know exactly why a definite pain in the thigh invariably predicts an intestinal explosion. It is quite necessary, however, that I do not accept them as independent and treat one as rheumatism and the other as colic.

It is not necessary that I be able to explain the method of production of angina pectoris. It is quite important that I realize in a given subject that, in spite of his stiff aorta and sclerotic coronaries, he has or has not angina, according as he is or is not overwhelmed with gouty accumulations.

These are suggestions which I wish to urge, though superficially and inadequately presented.

A broader interpretation of morbid phenomena, which will recognize the interdependence of functions and seek to systematize the presentations, is the work before us. It will not be done in the laboratory. It will not be done in the hospital. It will be done in the industrious drudgery of private practice, but it must be first an acknowledged task.

The mass of pathologic data poured upon us constantly gives rise to the impression that pathology is becoming more and more complicated. In the confusion of production its classification has been rather disjointed and its conclusions unstable, but the principles of pathology are growing fewer and simpler. The aspect due to the peculiarity of local response does not constitute a pathologic entity and should merge at once into the composite picture. We must recognize that every organ and tissue has its own reaction to the general morbid influences which occur.

Anatomically or organically considered, the array of diseases, if we so designate them, is a multitude. It is only rational, however, to carry our identification back by careful analysis to the simple systemic vice or defect or attack to which our outbreak is reaction.

Regarding then the systemic equilibrium as the central thought in forming a diagnosis, it follows that the foundation of a diagnosis is knowledge of the normal. This sounds like a truism, but I am serious in my statement that in my observations of educated men, and in my experience as an educator of students, the most pronounced defects are here evident.

All scientific effort is recognizing this truth. In all directions it is seen that between the class of investigators who study the past result—the dead—and the class who study only the morbid and diseased individual or class, the path of progress becomes dubious. We gain information thus; we know and classify results; but we learn little of *process*, and hence acquire little power either in foreseeing or averting results.

It is as true in medicine as in social science that the laws determining bodily equilibrium are primary to the study of disease; hence in closing I would direct your attention to the obvious fact that in establishing the lines upon which comprehensive diagnosis can be made, we penetrate to the earliest departures from the normal, and inevitably and permanently subordinate our interest in the pathologic to the desire to maintain the normal, and thereby put the crowning glory upon the science of medicine.

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CHOREA: ESPECIALLY IN RELATION TO RHEUMATISM AND ENDOCARDITIS

CHOREA has been regarded in general as a functional disease. Whatever was meant by that term, the basis of that view has been its transient character, its perversion rather than its destruction of function, and its lack of morbid anatomy.

No question is more surrounded with contradictions than that which we must ask at the outset of this discussion: What is functional disease? Without attempting to answer, we may reflect upon the various factors that are concerned in our answer at any given period.

To start with, the designation is relative and subject to modification as knowledge grows. Hence the conception has only stability for such periods as afford no advance in knowledge and classification; in fact, it is always provisional. It stands primarily in antithesis to the term structural—organic—and in that relation of course recedes before deeper acquaintance with pathologic change.

We may readily conceive that in a strict sense there can be no disease which has not some alteration in molecular arrangement; hence, which is not finally structural. The logic of our progressive change of view is to such a conclusion.

Long before such a point is reached, however, we shall come upon another point of view: To what extent are structural changes the expression of the exposure of tissue to altered conditions, probably chemical? and hence are not such structural changes only partially explanatory of disease manifestations? And out of this reflection springs the question: What will a given exposure induce in the way of symptoms, at various stages of the structural changes

consequent upon it? At once we see that not only do the most varied groups of symptoms become allied in reactions of different tissues to a common cause, but we may fairly infer that the play of the chemical influence upon the organic mechanism will result in changing pictures as the structures progressively alter; and therefore that the same organ reacting to a given influence in altered function, changing its own structure under the same stimulus, will present at various stages of its pathologic progress perversions of functions, so various as to cause them to receive quite distinct consideration and description. Accepting the necessity for such treatment, we need not lose sight of the simple factor in the reaction, nor forget that we are dealing with progressive processes.

To conclude, therefore, as we may in future, that all disease is organic, even though we fully comprehend the change in structure, by no means satisfies the demands of our problem. It is not ultimate, and the inquiry must go much deeper.

So it appears that there is no place for the term "functional" except as an expression of one of two views: either describing a reaction whose structural basis is unknown, or as implying the possibility of response to morbid influence without permanent organic change. In either event the morbid influence is becoming a more essential factor, and we find steadily less opportunity to reckon without it. By such a pathway have we come to the recognition of the influences which we call toxic, and even the term septic and the idea of infection find their interpretation in this broader intoxication. It is only in such generalization that we can reach any standpoint, even provisionally, from which to regard this very interesting but obscure topic under discussion.

Chorea has run the whole gamut of speculation as to its nature. Functional, embolic, toxic, infectious, degenerative—all possible views have been advocated strenuously.

We are, in fact, not in position to form a conclusion about it. Each aspect of the case lends strength to one or another of the hypotheses. None of them are universal in application, and hence one of three conclusions is necessary: either there are numerous different causes, or there is a cause not yet ascertained, or there are coöperative causes. Our use of the term will refer solely to Sydenham's chorea, which is the only real chorea clinically. Even with regard to this there is a wide difference of opinion as to whether there are not various kinds. In view of the fact that we know so little of the basis of any kind, it is at present rather a fruitless contention.

Clinically it is a well defined affection too familiar to justify one in its description. Let it suffice that it is frequent, serious, complicated, and at times amongst the gravest of diseases of the young. Whence comes it? Out of all manner of conditions, to be designated as debilitating, excited, or disordered. There is indeed little in common in circumstantial facts. That aspect is protean.

At an early date the apparent association of chorea with rheumatism led to much discussion of the topic. The question has been vigorously argued. By some it is maintained that it is allied to rheumatism in general; by others that only that rheumatism which had endocarditis as a complication, presumably making the endocardial lesion the connecting link; by others the whole relation of cause and effect is denied.

First, what are the facts? In a very large proportion of closely analyzed cases associated rheumatism is to be inferred from various arthritic or similar manifestations. These arthritic developments, however, are distinctly divisible into the attacks which coincide with the chorea and those that precede it by a variable but considerable interval. Much more marked is the association of endocarditis with chorea—that is to say, endocardial lesions, not necessarily recent. Even so, the explanation of the

coincidence is not ready, and when one considers that the various morbid outbreaks in a number of these cases were separated by long intervals, it is with hesitation that one concludes that there is a causal relation.

Let us digress for a moment and observe what is true of endocarditis. That it may be due to infective invasion, in the course of various diseases, there is no question; that it may be due to participation in the reaction to the morbid agent of rheumatism there is no question. Whether, in pursuance of the suggestions therein contained, rheumatism is an infection is beside the point. We see that endocarditis is associated with rheumatism. Is it a complication? By no means. It is rheumatism. Nothing is more important than that we divest ourselves of the idea that endocarditis is a sequel of rheumatism. Often, very often, in children, it is the only manifestation of rheumatism, and more often the arthritis that coexists or precedes is so slight as to escape attention. Likewise, with enormous frequency, the endocarditis escapes attention in the absence of arthritis.

The observation is well verified that endocarditis is essentially the rheumatism of the young. Yet what is the relation between the cardiac and arthritic manifestations? Gradually evidence is accumulating that rheumatism is a septic process; whether of one form of coccus or another does not matter to us at this time. The fact, if established, will serve to simplify and harmonize the relationship between the joint and cardiac lesions.

The known relation of cardiac disease to septic and infective processes has logically demanded such a nature for rheumatism as a causal antecedent or collateral process. The toxic foundation of rheumatism, though by no means disposed of by such demonstrations, receives an important coördinate factor. Manifestly, if it is demonstrated that the arthritis as well as the endocarditis is of infective origin, the problem will still be open. Is there an underlying toxemia? Clinical observations, it seems to me,

abundantly suggest this to be the case. Yet it is simple to overdo the toxemia view, by reason of its very generalizing character.

But more specifically, to touch upon that ground, which if it were not most important would be trite, the relation between rheumatism and gout, what is our view? 1, Are we not reasonably sure that much of the clinical showing of gout, of all sorts, is chemical—that is, toxic? If so, we can not disregard its value in this problem. 2, Are we not reasonably assured that there are various conditions of disease in which, alternately or together with a form of rheumatism not typical gout, we find a cause in the gastrointestinal chemic perversions? Instances of alternating diarrhoea, asthma, pseudo-angina, bronchitis, and arthritis I have heretofore reported. These I believe to be more or less correlated evidences of a common toxemia. Of the possibility, nay, the frequency, of such complex pictures I am persuaded.

The question may fairly be asked, Is the arthritis in such cases identical with that of rheumatism? So far as my observation goes it is somewhat regularly subacute or chronic, and has not been shown to be septic. Clearly, it may be different, but my point is not altered thereby. The alternation or coincidence of arthritis and neurotic manifestations, repeated to the point of moral certainty, no matter how obscure the cause, is the fact I wish to set forth first. I am quite sure this happens. Hence I am quite prepared to regard a neurosis, which can be clinically associated with arthritis, as being also etiologically related. The record of clinical behavior of the body reacting to toxins is full of surprising facts, and I do not at all share the skepticism of those who see in the utter unlikeness of the symptoms a necessary separation as to origin. Secondly, I wish to call your attention to the fact that toxic agents are produced under widely different conditions, and that we have no reason to regard the influence of toxins as essentially

different, though of different origins. There is no reason, for example, why a chemical substance, the result of acid fermentation in the intestines, a chemical substance, the result of defective proteid metabolism in the tissues, and a chemical substance, the result of the physiological activity of bacteria, should be held as anything but chemical agents. They are capable of producing effects, dependent upon character, amount, access, concentration, condition of resistance of the body attacked, and, of course, many other factors. What will this poison do to this cell, under these conditions? It is not a complex statement. The point of view, however, to my mind is important, and clinical observation furnishes us with plenty of such significant relations.

Unfortunately, we have no consistent observation as to the morbid conditions that exist during the attacks of chorea. The seat is doubtless cortical, and the post-mortem findings have been not at all uniform and are very meager. Recently a few cases have been thoroughly worked up which lend weight to the view that the neurosis is not toxic, that is of remote origin, but that the infective agent is really at work in the brain as in the joints and heart. Such a demonstration, if it come, will of course simplify the conception so far as these disease manifestations are concerned, but will not dispose of the facts which are now more or less stumbling-blocks.

In spite of the fact that the light that comes tends to identify both rheumatism and chorea with infectious processes in some way, the most serious obstacle to considering them as one in origin lies in the fact that only a part of the cases of chorea, variously stated as from 18 to 50 per cent, have any history of arthritis. As bearing upon this point, however, it must be said that the rheumatic arthritis of children is regularly so slight that defective observation and forgetfulness may readily account for a very large error in this respect. This suspicion may be emphasized by the

fact that endocardial lesions' indelible marks are very much more uniformly found in chorea than is a history of arthritis. Couple with this the fact that the arthritis belonging to endocarditis is in a large number of cases either wanting or overlooked, and we have reason to distrust the statistics which report only "undoubted" histories.

Even though the discrepancy cannot be overcome—assuming that many cases of chorea have had no arthritis—does it follow that there is no relation? Assuredly not. Are we not agreed that endocardial rheumatism may be independent of arthritic rheumatism? If so, why not choreic rheumatism? We must admit the toxin. We must admit the possible neurosis the result of toxic action. Why not the chorea, from rheumatic toxin without arthritis? Clearly, there is no reason why not. All that remains is the demonstration.

Are we not also agreed that there is endocarditis from many infections besides rheumatism, if indeed rheumatism be an infection? There are many forms of arthritis besides that of rheumatism, of infective origin. We have gonorrheal, pneumococcic, pyemic. In fact, how many have we? All are more or less subject to confusion under the name of rheumatism. Indeed, we must hold this subject lightly, prepared to change our views on all the factors involved, but with a clear recognition of the fact that the evidence is accumulating that chorea, arthritis, and endocarditis are (1) related to each other, (2) related to infectious cause or causes.

We have no reason to assume that this is the only cause. We have no ground for stating that the same agent that induces the arthritis induces the chorea. We have reason for demanding that an explanation, to be accepted as final, must account for:

1. The decided heredity in chorea—76 per cent of neurotic family history.
2. The preponderance of association of chorea with

what we clinically call rheumatism, including its predisposing factors.

3. The various toxic relations not only of chorea but of rheumatism, now thought not to be septic.

4. The most obscure, the fact that clinically distinct chorea has followed upon emotion and fright, at times immediately, in cases sufficient to demand explanation.

It is not wise to be too technical in this analysis. One can erect barriers to any extent upon any one of these obstacles. A broad view is what we want, into which will fit the various demonstrations as they come along. The impression is not to be escaped that we are dealing with related conditions. It grows more probable that they are infective. Let us not be confused by the contention as to whether the infection is simple or "mixed"; nor by that as to whether we have various kinds of chorea or arthritis; nor by the difficulty of explaining the purely neurotic features.

The conclusion is warrantable that endocarditis, chorea, and arthritis are coördinate manifestations of disease conditions, peculiar to the young in that order, and that an important element in causation is infection.

Beyond this statement we cannot go, but it is well if we are justified in going this far that we agree about it. There has been great opposition to the adoption of the theory of a relation between chorea and rheumatic conditions. One must, however, face the facts, and the significance of recent demonstrations adds weight to the view that by some combination of etiologic factors the coincidence of chorea with the usual manifestations of rheumatic poison deserves an essential rather than an incidental interpretation.

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TREATMENT OF TYPHOID FEVER

AS you will note, the title of this discussion has been carelessly designated, because it might be supposed to lap over upon the territory so ably discussed by Dr. Walls, which it is not my purpose to do, nor will time permit me to discuss typhoid fever at large and in all its manifold details. It is obvious, in view of the few minutes allotted to me, that it would be impossible to more than skim over the various phases of the subject, and such treatment would be unsatisfactory and unprofitable. It seems, therefore, justifiable to take up the question of typhoid fever in relation to its therapeutics, by discussing some important and salient points. I trust I may be pardoned for speaking extemporaneously, for it enables me to deal more satisfactorily with the subject in these few minutes.

If I were to announce what the proper treatment of typhoid fever is, according to my view, I should immediately have a host of members disagreeing with me. I, therefore, propose to confine what I have to say on this subject to a discussion of hydrotherapy, and that particular phase of it which is the most valuable.

I think it will be agreed in general by those who are disposed to discuss matters consistently, and certainly by a large proportion of those who are teaching and practicing in hospitals, that hydrotherapy of the bath type is distinctly a proper thing in typhoid fever. Is that, however, the consensus of opinion in the profession as evidenced by their practice? If it is, I am thoroughly mistaken, and my remarks will be superfluous. If it is not, it furnishes the theme of what I have to say. Statistically, this question hardly deserves discussion. The statistics on this subject

have grown so large and are so overwhelming in indicating that the typical bath treatment, or the so-called Brand treatment of typhoid, yields decidedly a decreased mortality, that no one disputes them. Statistics are always deceptive, yet on this point they are so voluminous that we can not ignore them. It is to be said in fairness to those who oppose the bath treatment, that the statistics of the other forms of expectant treatment are imperfect. In other words, the statistics bearing upon the bath treatment, as compiled from various parts of the world, are based upon the best and most efficient use of baths, whereas the converse is true of the statistics of other practice, which includes all sorts of distinctly bad treatment. However, passing that by as a necessary fallacy that lies in statistics generally, let us consider what we are talking about.

What do we mean by the bath treatment of typhoid fever? Let us take the typical, original Brand bath. It may be defined, please notice, as the vigorous rubbing and manipulation of a typhoid patient, well immersed in water of a temperature varying from sixty to eighty degrees. I purposely put it in that form because I wish to emphasize the fact that the manipulation in the bath is an essential part of the process, and that the temperature and other features of the water are much more subject to variation than the manipulation. That is what we mean typically by the bath treatment.

What is the theory upon which this treatment is now carried on? Unquestionably, the theory originally with regard to this treatment was that it was an efficient, essential antipyretic measure. Is it now generally so regarded as a primary antipyretic measure? I think it will be agreed by those who have experience in the matter, that although the antipyretic value of the bath is great and important, it is a mistake to centralize our attention upon its antipyretic effect. The theory of this treatment is that its effect upon the patient is two-fold, first, sedative; second,

tonic. Practical observation by everybody who has had experience in this direction will enable him to draw this conclusion: That an adult patient who is subjected to an intelligent administration of a cold bath in typhoid, typically and regularly, shows marked sedative effects, as manifested, first, by a feeling of comfort, as against a previous feeling of malaise; second, manifested by a tendency to sleep, as contrasted with previous restlessness and inability to sleep. Those conditions are distinctly marked in the ordinary, regular, typical bath. The second phase of this important condition is said to be tonic. Upon what are we justified in basing that conclusion? First, an improvement in the cerebral condition, a condition of clearness of mind as against hebetude; of alertness as against indifference; of comfort, physical and psychical, as against distress. There is no question that this is a fair index of improved tone.

Again, with reference to the digestive tract. There is typically a better digestion, as evidenced in two directions, namely, by the decidedly less typhoid character of the tongue, and, second, by the almost invariably less tendency to meteorism. I do not wish to go outside of the facts in making these statements, but I think they are borne out by experience. All of these various phenomena incident to the results of baths in typhoid, whether the patients recover or whether they do not, have been ascribed by those who theorize upon this matter to an improved elimination on the part of the patient. In other words, the bath is supposed to operate as a tonic, primarily by a sharp stimulus to the nervous system; secondarily, as an eliminant of marked power over the individual in fever.

Whether this is so or not is inferential. It is based upon obvious improvements in what we have been regarding, I think, and are justified in regarding, as the evidences of toxemia. Two facts stand together to bear out this idea of better elimination. First, that almost invariably there is a marked improvement, by which I mean an increase, in

the excretion of urine. That is typical, regular and reliable. The other is something which I do not know by experience but which statistically or experimentally is presented to us: the fact that the toxicity of the urine, after and in connection with the bath treatment, is said to be increased, indicating larger excretion of toxins. Of this there is little doubt. At any rate, I am not in a position to deny it. If, then, this is the theory that underlies these baths, and the marked improvements of condition, and if time shall prove this theory to be sound, there can be little doubt that the bath treatment will be placed on a solid foundation.

There are, however, modifications of the bath treatment which it is worth our while to discuss. Typically, a patient is taken out of his bed, with a temperature of $103^{\circ}-4^{\circ}-5^{\circ}$, as the case may be, and suddenly immersed in a bath of a temperature of 75° or 80° . It is understood by foreign authorities and some of the best authorities in this country that this plan yields better results than does any modification thereof. My experience with that form of immersion is so much less than my experience with another, that it is with some diffidence I express the opinion, namely, that there is a modification of the Brand treatment which, in its clinical results, is as good, and which, in its practical results, is much better.

In hospital, for two reasons, a modification is often pursued. One is that the actual manual manipulation, the help necessary to immerse patients in the tub, take them out, and dispose of them in that way, is considerable, so much so as to essentially make it almost impracticable in many hospitals. It would not be impracticable, of course, in a large and well regulated hospital. It is not an unfeasible thing to administer the Brand treatment, pure and simple, in a hospital.

In my own experience I have departed slightly from the Brand method of treatment, for this reason, that my experience has taught me what I believe to be true, namely, that

as good results can be obtained by another method which I will describe in a moment. Private practice demands a modification of the Brand method. The practical affairs of life have to be considered. The second reason therefore is that our nurses, who are to be educated for private practice, should be educated in practical ways with that in view, and it is my opinion that it is as well for us to use a modification which I believe as good, during their training in our hospitals. You are all familiar with the construction in the bed of a tub of any kind, either the Haven or the Burr, or any other form; instead of immersing the patient in water by dropping him in, you pour the water over him, having sufficient water to submerge the patient. You cover him with a reasonable amount of water. The water in such a tub heats more quickly than in the ordinary bathtub, and in consequence the measures for cooling the water have to be somewhat different. Where the water is put in at a reasonable temperature, it can be cooled by adding pieces of ice repeatedly until the temperature is reduced to the desired point and maintained there. The patient is kept in the tub for a variable length of time and is constantly rubbed. Almost any man who saw, for the first time, a typhoid patient in a tub of water would say that the patient was being maltreated, for the reason that he becomes cold, shivers, is blue, has distressing symptoms, and frequently implores us to take him out. This, however, is not really the case if we are accustomed to it. It looks like maltreatment, and it takes some experience to go on with it in the face of that, but, after all, when a patient is once taken out of such a bath, and rolled in a blanket, he goes immediately into a state of repose, perhaps sleep, and sometimes continues sleeping for hours. His pulse grows slower and stronger, his respiration deeper and calmer, and his temperature falls more or less.

That form of bath is practicable in any house under any circumstances, where there is one person who can devote

his attention to the patient, whether it is a trained nurse or not. I say this with emphasis, because it is true, and because the generally prevalent idea is that it is not true. It is of the greatest importance that we come to recognize that this can be done in any private house where there are any facilities at all. I do not mean now necessarily the surroundings of opulence.

The great difficulty in having this form of treatment adopted arises from the fact that the majority of patients with typhoid fever recover; hence; all of us are so accustomed to treating them through to recovery, that we expect them to recover without so much fuss. What fuss do we make? As they go on and get sicker and sicker we sponge and pack them; we do all sorts of quasi-therapeutic things to reduce temperature. Does anybody say that sponging or packing is distinctly tonic, sedative, or eliminative? It may be, but that is not the idea. The idea of these collateral, alternative procedures is to reduce temperature. But the reduction of temperature is not the point. The condition is the point, and I wish to say without equivocation and with the firmest conviction, that the condition incident to the bath treatment is beyond any question better than the condition incident to any other form of hydrotherapy.

It is rare in these days in hospital treatment that we see a typical "typhoid state." Why? Because, whether the mortality is obviously and noticeably decreased or not, the condition of the patient, the severity of the attack, and the general course of the disease are inexpressibly milder, more manageable, more comfortable under the bath regime than under any other treatment I have ever seen, and I have seen the other in all its horrors. Let us assume that the bath treatment is practicable in private practice with any nurse who is properly trained. It is practicable with anybody who can give his or her attention to it faithfully.

What are the difficulties in private practice? I will be answered by fifty physicians here to this effect — opposition

on the part of the people. Is that a good reason? Obviously, if the treatment of typhoid with the bath is distinctly a better therapeutic measure, the moral obligation is so great that we can not consider it as a cogent reason. If it is not a good reason, if it is not a sufficient reason, then it is obviously our duty to do the very best we can for our patients. General opposition on the part of the people does not exist. It exists as a remonstrance, as a surprise, as a reaction to an innovation, but it does not exist as an irresistible, immovable obstacle, and it is entirely within the scope of the physician to go in and master the situation, and if he can not prevail, to withdraw.

There are one or two points that I want to speak about. In the early baths, when the patient does not know what is going to happen, you had better not talk about cold tubs. The early bath should be spoken of as a bath. If you wish, give the patient a warm bath. Let the whole process be done with a warm bath until the patient gets over the newness of the situation. Let the first bath be, for instance, not cooler than 90° ; the next one reduced to 80° ; the third one to 75° , or to the point you desire it. In other words display a little sense, and there will be no difficulty about it.

In the second place, the earliness with which the typhoid regime is instituted and used is as important in the bath treatment as is the antitoxin for diphtheria. It is here we make a mistake. We wait until patients are very ill before we give the tubs. I say this from considerable experience: Resort to the use of the tubs early; do not wait for a diagnosis, if the temperature warrants the use of tubs. If the case is not typhoid, no harm is done. If it is typhoid, you have doubled and quadrupled your therapeutic effect.

In conclusion, let me urge that we meet this matter squarely. Do it well and with conviction or not at all. Many nurses are not trained to "tub" and do not help along, especially with an objecting family. They must be taught. Teach them. Many physicians, recognizing the trend of

scientific opinion, make show of using tubs, but often inefficiently and usually too late to secure the best results. These are formal rather than real efforts. If the thing is good we ought to want to use it thoroughly. If it is practicable, there is no excuse not to. Why, then, is it not general? Let the ten per cent of avoidable mortality continue to demand. Why?

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VENESECTION

I WILL not apologize for occupying your attention with a topic to which I am able to bring neither new facts nor satisfactory conclusions. My excuse is the importance of the subject.

You will agree with me, first, that there has been during the last few years a tendency to place a greater value on bleeding; second, that the indications for its use are vague and indefinite as now defined in the literature; and you may agree, third, that it is of the utmost importance that this procedure of recognized value be not again discredited by indiscriminate employment in obviously inappropriate conditions.

Nowhere can one glean a more instructive lesson than in following the steps of Trousseau as he slowly drew away from the then dominant views as to venesection, sifting out with his rare judgment the real from the apparent, and finally taking a stand that was quite out of harmony with his contemporaries. It is noteworthy, however, that his reservations as to the value of bleeding were in general centered on two aspects of the subject: The antiphlogistic, which he did not subscribe to; and the purely mechanical, as, for instance, the value of bleeding to check or remove cerebral hemorrhage, which he likewise discredited. Both of these reservations he fortified by convincing experience, not only as to non-efficacy, but with a positive opinion that patients so treated progressed less favorably than others. It is not likely that on these aspects of the matter his judgment will be found faulty. At that time, however, there was hardly considered the specific relation of the blood vessel contents and the inadequate heart.

Time has developed a view that there is a condition liable to occur in which there is, for various reasons, an incapacity of the heart to dispose of the blood which it is called on to circulate. It is not my purpose to discuss that. At this time we are obliged to accept it as a working hypothesis.

The point of importance, then, is: What are the various conditions under which this heart inadequacy may develop? and out of that inquiry, what of these are in any degree amenable to correction by the withdrawal of blood? In many cases of respiratory embarrassment in which asphyxia is threatened, it is difficult to form a judgment as to the most important factor in the embarrassment, inasmuch as cardiac labor is associated with toxic neuro-vascular conditions impossible to disentangle. Occasionally one will encounter a situation that seems reasonably plain.

CASE 1. A man, seventy-two years of age, robust, sturdy, and of sound organs, so far as careful clinical observation by myself during several years past could determine, living in the suburbs, having a cold, came to town without an overcoat, took a Turkish bath, and went home chilled. At once became "stuffed up" and rapidly grew worse, until in the course of six hours I saw him in consultation in the following condition:

Cyanotic breathing approaching stertorous, very restless, but almost comatose, breathing slowly and noisily. Lungs filled with râles, distributed universally. Heart sounds inaudible, partly because of pulmonary noise. Heart dullness decidedly increased, pulse feeble, irregular and almost vanishing. My statement was: "He can not live two hours." I obtained permission to bleed; withdrew 950 c.c. of blood. As it flowed, the patient grew quieter. Pulse returned, consciousness returned, turning on his side slept two hours, constantly improved in his respiration and recovered. At this date he is exceptionally sound for a man of that age.

I cite this because it marks a type. Having a set of conditions, due to accidental circumstances, which conditions I interpret to be intense pulmonary engorgement, with right heart distension, in an individual whose organs are essentially sound, and an exciting cause, transitory in character, there can be little question that, first, in such conditions blood letting is indicated; second, that its action is strictly mechanical, removing the immediate over-distension, so paralyzing to any hollow viscus.

To this exact type few cases conform, for either the organic conditions are originally degenerate, or the exciting causes are not transient, being much more likely to be infectious. A judgment as to the degree of approach to these conditions is important as a basis for an opinion as to the probable good to be accomplished by bleeding. Unquestionably, organs not too degenerated may be successfully relieved, and that even in the presence of continuing and augmenting excitants. But, generally speaking, the non-febrile, or perhaps toxic as against infectious, conditions will offer more opportunities for useful interference.

Despite the fact, however, that these optimum conditions are unusual, their rarity has more relation to prognosis than to therapeutic indications, for, beyond doubt, there are conditions demanding relief by these means which have little in common with the case cited, yet in which the immediate danger is cessation of the pulmonary circulation.

CASE 2. A man of fifty-four years, very large, strong, and of previous bad habits, whose recent history, though not the subject of medical investigation, should be interpreted as that of dilating heart, presumably with marked degeneration.

He was found with great dyspnoea, somewhat cyanotic, capillary circulation very bad, pulse rapid and feeble. Eight hundred c.c. of blood withdrawn produced at once relief to breathing and general distress and a considerable

improvement in venous and capillary stasis, but no material improvement of pulse and with no considerable response to a repeated venesection or to other treatment. Patient died after a period of two days.

This case serves to mark the contrast between two individuals whose essential difference was the condition of heart muscle: The one who died, relatively young, exceptionally strong, plethoric, and far less obviously embarrassed; the one who survived, old, relatively far less strong, and not plethoric, and, at the time of treatment, with dissolution impending. It seems to me plain that, from the mechanical side, the condition of the heart muscle rather than the intensity of the provoking cause will determine the issue.

With regard to exciting factors in these conditions, one can know but little. "Taking cold" is an obvious enough fact, but quite inexplicable. That it is a mixed result of toxic influence and neurotic response seems likely, and its varieties will show the preponderance of the neurotic factor at one time and the toxic or infectious factor at another. This view is illustrated by cases which occur under circumstances which do not seem to be causally adequate.

CASE 3. A woman, thirty-eight years of age, was brought into the hospital giving a history of several days' sickness. Her condition on entrance was that of exaggerated dyspnoea, pronounced cyanosis, and the following physical findings: Respiration audible over the whole of both lungs, showing no signs of consolidation, but with the most extreme development of moist râles which I have ever heard. Expectoration reasonably free, watery, but not bloody. Pulse 130, with considerable volume, but irregular. Area of heart dullness decidedly increased to the right, but heart tones not appreciably altered.

The patient, being in terrible distress and with increasing cyanosis, was bled 600 c.c., she being rather a delicate type of woman. The symptomatic relief was immediate, the

breathing becoming easier, the distress abated, and some sleep followed. For the time the pulse was markedly improved, both as to regularity and rate. The pulmonary conditions, however, did not change so far as I could see, and the patient went on, and in the course of two days died, without, however, a recurrence of the intense dyspnoea. There was, during the course of this attack, no rise of temperature. The cause of this attack was quite beyond my discovery, inasmuch as the general clinical findings were negative. That weakness of the heart itself was not the precedent cause, is rendered probable by the history of previous perfect health.

It leads one to suppose that some acute toxic or possibly infective element was present and persistent. It indicates in a way the hopelessness of venesection in the presence of a persistent exciting cause. This case I would distinguish as not of the class of angio-neurotic edema, of which I have seen a few. That there may have been, however, some deep analogous toxemia is quite possible. In the three cases cited, symptomatic relief was afforded by the withdrawal of comparatively large quantities of blood. All the circumstances warrant the belief that mechanical obstruction and overpowering of the right heart formed the essential difficulty. The question arises, whether the overpowering of the right heart is necessarily mechanical.

CASE 4. A man, sixty years of age, robust, of reasonably good physique, and on recent observation pronounced sound. He was taken with pneumonia, in a typical way, developed immediately intense pain, and in the course of twenty hours profuse watery bloody expectoration, not rusty nor prune juice, but bright red. The intensity of this feature was very noticeable. On the third day, while signs of hepatization were not clear, the heart appeared to become markedly embarrassed. It became extremely arrhythmic, feeble, and rapid.

The suspicion was inevitable that, in spite of the previous

opinion based on recent examination by myself as to the soundness of the heart, the heart muscle was badly degenerated. It had all the behavior of an exhausted heart.

Although there was some divergence of opinion among the attendants, most of whom thought that the behavior was an evidence of intense toxemia, it was nevertheless agreed to bleed, on the hypothesis that the weakened muscle needed relief in any event. Venesection was made and the relief to the symptoms was noticeable from the very beginning of the flow. So very marked was this that, when the flow was obstructed somewhat obstinately after 300 c.c. had been withdrawn, it was deemed advisable to let the matter rest at that point, inasmuch as a fresh venesection could be made at any moment. The heart became regular, the volume fair, and the pain and dyspnoea distinctly less. The relief in this matter was not very prolonged, however, and subsequent venesections were done with the same relief each time, the case passing on at the end of a week, however, fatally.

Throughout this experience, with the brief intervals represented by the periods of relief from bleeding, the heart of this man seemed absolutely untrustworthy, basing the judgment on the character of the pulse. On the other hand, with heart tones reasonably satisfactory, there was maintained an unusual excretion of urine, and, in the early history, of exceedingly good quality.

It is clear that the cardiac inadequacy could not have been as great as appeared. It was, however, a matter of great surprise at the autopsy to find that the gross appearance of the heart was rather noticeably normal. Not only was the color and texture of the muscle good, but unusually firm and of normal thickness. The microscopic showings indicated certainly no greater fibroid change than is usual at that age, so that the summing up of the heart condition must be considered as very far from degenerated.

Two facts are noticeable: The bad action of the heart

at the outset of the infection when the minimum of lung was involved, and second, the marked improvement of heart action under the withdrawal of a minimum quantity of blood, 300 c.c.

This case raises the questions: First, to what extent heart embarrassment may be toxic rather than mechanical; second, to what extent under such intoxication, otherwise minor embarrassments may become important; third, whether there is some complicating or intermediate factor operating through the nerve centers which indirectly affects the heart capacity.

I am aware that this is more or less fruitless speculation, yet I would call attention to two facts among many which possibly bear on it. First, the fact that the same symptomatic relief as to the pain and dyspnoea sometimes follows leeching and cupping, which manifestly is not immediate relief to the right heart. Second, that conditions purely neurotic, such as tetany, are by old writers considered as susceptible of symptomatic relief by bleeding.

I am unable to put these reflections into any more tangible form, but the question is always in my mind, to what extent an indirect influence is involved in this question of bleeding.

I omit detail of a number of venesections in more ordinary conditions, namely, advanced pneumonia and cardiac embarrassment, all terminating fatally. The preceding cases are all unusual in some respect. The point interesting to me is, from these as a text, Do we gain any idea as to indications? The fact of fatal issue does not at all bear on the case, for in the nature of things the majority of patients so treated will die. What we want is a method of reasoning that will reduce the useless bleedings to a minimum, and still insure the relief where bleeding would serve a useful purpose. Let us postulate, then, that whenever we encounter great pulmonary embarrassment due to vascular engorgement, bleeding is suggested. What are

the determining considerations? Ought we not to ask, first, Is the engorgement irritant, that is, toxic, or is it due to stasis? The conditions at the outset of pneumonia are irritant, at the close due to stasis, that is, paralytic. If we bleed early, it is as a prophylactic; essentially as an antiphlogistic measure, but with an eye to the heart struggle later. If we bleed late, it is to assuage the struggle already taking place.

The experience in Case No. 4, pneumonia with bad heart action from the first, relieved repeatedly by small bleedings, raises the question whether there are not conditions in which repeated small bleedings are useful. Certainly neither primary nor terminal bleeding has given much encouragement thus far. Ought we not to ask, second, Is the toxic cause to be considered as transient or increasing?

In response to the query, Which will be classed as increasing? if we reply, Pneumonia and other acute infections, it will tend to rule out venesection as a rule, providing we feel that a progressive cause is a bar to its usefulness.

Unless we believe in real antiphlogistic effects, which I fancy we do not, free early bleeding seems to me to be of doubtful utility. The rare condition of extreme plethora might justify it, but plethora is not, as a rule, intravascular excess, but the blood tension is in part a general condition which is likely to be speedily reproduced from the tissue conditions, and, on the other hand, the cardiac exhaustions are not at all confined to the plethoric, but bear close relation to the toxemia and vital resistance.

If it can be assumed that the toxic or excitant cause is not progressive, at once we reach the third question: What is the condition of the heart muscle? Instances where it is good and known to be good, as in Case 1, are rare, but furnish a clear indication. Cases where it is unknown but presumably bad, as in Case 2, furnish a doubtful justification.

Conditions that are reasonably to be considered as not degenerate, as in Case 3, the woman with edema and no general lesion, furnish good indication.

However, most of the instances of acute right heart embarrassment occur in individuals whose cardiovascular conditions are chronically deteriorating. The indication is clear enough where suffocation is threatened, but the prognosis is bad.

Time will not permit me to go farther into detail. There always arises the question, Will it do harm to bleed? The answer is, Rarely, under conditions that at this day would be at all considered. Even the theoretical contraindications of some authors I believe to be largely fanciful, and the few instances of disaster that followed letting of even a very small amount of blood may be disregarded. In spite of the fact, however, I believe that we should move in the matter with the utmost discrimination; not so much that we may endanger the individuals, but lest we discredit a therapeutic measure that is slowly advancing to its true status.

Delivered, University of Chicago, June, 1905.

AM I MY BROTHER'S KEEPER?

IF there is one idea more than another characteristic of to-day's civilization, it is the conviction that in the abstract and in general a man is his brother's keeper.

Side by side with the development of the concept of individual responsibility grows the principle of common oversight. While the belief in individual liberty becomes more deeply rooted, the principle of reciprocal rights and obligations limiting and qualifying personal freedom is established.

According to our relation to an issue, we assert or admit the rights of society to define the limitations upon individual acts, but under the fundamental reservation that the restriction be for the benefit of another. Direct control of the individual for his own good is not at all an accepted doctrine, and only exceptionally a fact, as some manner of police power.

We educate children by law because the unprotected adult is a drag upon society. We vaccinate the susceptible for the same reason that we wreck a building in the path of a conflagration, to break the path of conduction and diminish the material for feeding a scourge, thereby protecting contingent interests. But the good to the individual, if any, is incidental and not essential, and under rare conditions harm to the individual is held to be justified by the common need. Whereas, with more or less grace, we subscribe to this adjustment of interests upon the basis stated, we rebel furiously at the suggestion of control for individual or even class benefit.

We accept the State control of questionable commodities for public protection, and absolutely repudiate the suggestion of dictation to us as individuals in the use of them. We accept and applaud the law securing to the inhabitants

of a tenement adequate space for air, and utterly decline to be forced to have it fresh.

This distinction as to motive and object, as to ostensible beneficiary in public intervention in affairs more or less private, is as broad as the world of moral discrimination. It is not an academic question. It is an expression of the deepest ethical principle. It embodies the conception of duty, under moral inspiration of privilege, in circumscribing one's activities or forces to further the common good. But, it also unyieldingly adheres to the dogma that one's personal evolution is his most sacred trust. What is, therefore, upon one face a question of material interest, is, upon the other, one of moral existence, and the interpretation of rights under a somewhat wavering illumination is the chief problem of civic organization.

Obvious public necessity is well established as a paramount consideration, and the difficulties are chiefly practical; but private benefit as a basis of social enactment is, as a voluntary matter, regarded as demoralizing, and as a compulsory matter, outrageous.

At no point are the difficulties to be encountered greater than in the questions of public health. At no point is interference more resented by the ignorant, or more tolerated by the enlightened. It is an almost infallible line of cleavage between intelligence and prejudice, and it follows that the obstacles, being inversely as the intelligence, are almost insurmountable.

Up to a given point the principle of public weal is sufficient, and public acquiescence is practically coöperation. Beyond this point, however, the necessity to obey merges into the purely voluntary, and the will to do being absolutely dependent upon comprehension, we find a check in the advance of any sanitary movement so abrupt as to make confusion and even retrogression inevitable.

The consequence is, that sanitary science is in the position of utmost importance and influence in a definite

territory and impotent in the adjoining fields where lie its logical fruits.

It is trite to say that civilization is an artifact, which, up to even the present day, has grown with little plan and with but indefinite purpose. Side by side have been operating processes both favoring and antagonistic to human advancement.

It is a fact of great importance that average duration of life, and more notably still, the decrease of mortality in certain periods of life, have been the result of the condition of civilization. It is a grave fallacy to assume, however, that the achievement is of necessity an advance, or that it is unmixed with the elements of gravest peril. Natural selection in its ordinary sense is strongly modified and largely in abeyance, and in its stead is a selection of bewildering complexity. Infant mortality, to us a spur to our best endeavor in preventive medicine, is perhaps the most essential factor in race protection. Piteous as is the picture of the perishing weak, the dependence of the race upon that elimination is obvious. It is hardly safe to qualify this statement by saying, "under natural conditions."

What guarantee have we that, with all the resources of civilized conditions, we can neutralize the stream of viciousness, tiny though it be, that is left in by modern intervention in the selective process?

We imply, in the contention that there is such a guarantee, that society has a means to use, adequate to meet this situation and justifying the process.

If so, what is it, and is it in efficient operation?

If the great mass of infant lives saved by sanitary control were those of the intrinsically weak and defective, it is doubtful if the damage of preserving them could in any way be offset. If it were possible to preserve, up to maturity, the majority of the physically vicious, it is certain that the mark would be indelible. Fortunately neither of these propositions portrays the facts.

Although it is doubtless true that the physically non-resistant are especially the victims of so-called preventable disease, and hence under conditions undisturbed by modern ways furnishing the great majority of deaths, it is also true that the manner of life to-day brings into the vulnerable class practically all infants.

It follows that the natural elimination under our conditions so unnatural would remove the weak and strong and more than balance its salutary influence by this destruction.

We have no reason to believe the robust child to be greatly superior to the feeble in resisting infections. The problem of resistance to infection is too deep and extensive for this discussion.

In that respect the question, Who are the "fit"? would find its answer in surprising terms. However we may finally define the term, the practical battle with these destructive forces results in an enormous preservation of life, and to a large extent saves the weak with the strong. In protecting our best against overpowering attack, we also preserve our worst to be a subsequent problem.

Please bear in mind that in this connection I am speaking only of physical characteristics. Aside from the matter of infection, however, there are influences of great moment operating to equalize the ability to withstand the experience of life. Generally speaking, the hardships and vicissitudes of life are so modified as to remove the tax upon physiologic resistance to a degree very debilitating to the mass, while actually a salvation to the few. We are in an age of comfort and in circumstances of relative prosperity, and the evidence of it is not all æsthetic.

The same conditions of resource and opinion that make it possible to shield and succor the weak, lead to pampering and protecting the strong, to the end that natural accommodation to vicissitudes and the physiologic stimulus that determines the adaptation are impaired.

This is by no means confined to the well-to-do nor

conceived in the notion of luxury. Protection from the elements does not at all imply care or safety except in limited directions.

The babes in a tenement of the most unwholesome type may be protected from the greatest menace of childhood, undue exposure to cold and infected milk. The result on the one hand is life saving, even as to the very feeble, and upon the other deplorable as to all developmental considerations. The factors of growth and ripening, of perfecting—bone and tissue—blood and function, are almost utterly ignored, and still our obligation is before us.

Thousands of children are saved from death, which would overtake them in their surroundings, by sanitary intervention of various kinds. They are carried past the most vulnerable period, and become at an early age comparatively resistant, and have practically survived to be a part of the community that is perpetuating itself, and what has the community gained thereby?

Has it gained more than numerical strength, and is numerical strength a desideratum? Is it distinctly desirable that the earth be populated at all hazard as rapidly as possible? Are the lives that are perpetuated an element of strength and progress to the world? Do we realize that in bringing to maturity a given number of individuals we are also making it possible to pass on through procreation all their characteristics? Have we confidence in the power of nature to breed out weakness and viciousness, under the conditions that are imposed? Are we not certain that mental, moral, and physical defect are bred on and on, and hence that for every infant life saved to an individual essentially defective, society must pay an immeasurable penalty?

To all of these queries there are answers; to all the arguments implied in them, there are more or less adequate replies. Whether the world gains more than mere numbers in this process depends on circumstances. Equally it

depends upon circumstances how vigorously it is desirable that the earth be peopled. But the genius of civilization does not approach this problem in that way. It makes a sweeping assumption. It declares that life and the right to live are incontestable and inviolable.

Under the influence of ethical progress, it follows that the highest duty that society has is to protect the lives of the defenseless, and it is upon infant life that the most signal and systematic effort has been expended. That there is a tremendous force to be reckoned with, exactly in proportion to the success of the efforts to preserve infant lives, is too obvious for discussion.

The world learns slowly and reluctantly: That there is a penalty to pay for every interference with natural law. That the evolution of conditions is the massive movement of innumerable factors. That the individual groups in this mass are composed of antagonistic elements, whose powers for advance and restraint are not quite, but almost, balanced. That the fraction of superiority possessed by one factor over another determines the course, and hence that to introduce a strong and decisive force is to establish a train of consequences that must be met.

In the most unintentional and normal ways we have offended and are paying the penalties and struggling frantically to undo the mischief. The debt due to ruthless destruction of the forests, under the idea of progress, be it remembered, cannot be paid in centuries.

The hare was introduced into Australia for economic reasons as a food supply. It has become as great a problem from the standpoint of a pest as that country has to face.

Strange as is the experience of Java, it is more enlightening than absurd. The mongoose was introduced as an enemy to rats and mice. In consequence the mongoose, unchecked in its increase is apparently an unsolvable problem, while it is said that rats and mice have become arboreal animals.

This grotesque dilemma is most suggestive, and it is a gross but unmistakable illustration of the fact that for every disturbance of natural forces there is a compensation that must be accepted.

Would one annihilate, if he might, the rats, the bearers of bubonic plague, and if so, what price would he pay?

Science is recognizing this great fact of compensation, and this problem before the medical world is coextensive with medical activities. In all directions we are able to initiate movements and direct forces far beyond our grasp as to their correlations. We project a line and pursue it tenaciously, to a great extent ignoring its related necessities. We attain the limit for express trains, and have not crossed the threshold of safety considerations. We accumulate wisdom by experience and pay the enormous price.

Temerity in the securing of startling effects is as characteristic of medicine as of railroading, and the sense of responsibility as to ultimate results is scarcely as great.

So it is true in a sense that the saving clause in this implication, as to the woe of preventive medicine, is the fact that it is as yet inefficient.

All of this sort of "calamity howl" would come with bad grace if it were to stop with a mere criticism of the results of the very finest efforts of humanitarians. In fact, it is not even a criticism nor a reservation, but a reflection upon the long series of problems that stretch ahead of us as prospectors for human advancement.

What to do with the individuals snatched from natural destruction that they may not be a damage to the race, is not a greater problem than what to do with the race which drifts rather than travels to its destination.

The feeble and defective minority, that is so obvious an object of woe and solicitude, is not in fact materially more so than the more normal majority, and practically is in some respects less a puzzle.

The feeble, the technically "unfit," serve us to-day as

a text, as an example of necessary foresight that no one would deny, but if I am not mistaken, it is in reality more a text than the embodiment of distinctive viciousness.

While it is true that the vast majority of human beings are of the class of workers whose bread depends upon toil, in modern conditions it is no longer true that toil and the sweat of the brow are synonymous.

When we contrast the methods of labor to-day, with the primitive way of natural man, we see three facts clearly—first, that human intelligence has increased the productivity of the individual to a fabulous extent; second, that the benefit thereof is chiefly in the line of aggregate and accumulated product; and third, that the individual producer is not only not proportionally better off, but is by reason of the changes of method liable to be inexpressibly worse off in his actual physical relations.

It is to this third phase that this discussion must be confined. It needs but a word of reference to point the difference between the original tiller of the soil, the herder of flocks, or the worker in the simple arts, and their modern successors.

While one might compare favorably the essential life of the agriculturist of to-day with that of the past, so far as conditions of labor are concerned, yet in many of the ways of life the vices of civilization are as rife there as elsewhere.

But when one comes to compare artisans, the contrast is frightful. From the basement sweatshop fashioners of garments, up to the top-story factory child-laborers, and down to the sun-starved workers of the mines, we behold a continuous picture of "magnificent achievement" from the standpoint of national or racial wealth, the price of which is what? Human lives? Yes, more or less, but if that were all, it would be fortunate as compared with the full price.

Human manners and morals—thoughts and aspirations—sympathies and standards—all are in the balance and

under the dominance of burdened and smothered, tainted and poisoned body machinery and function. The trend is toward degeneracy.

"The sweat of his brow" has a meaning greater than mere toil and fatigue and numb submission. "Joy in his work" is the term that stands to man's spiritual hygiene as figurative brow-sweat stands to his physical needs.

But would you remind me that I limited myself to the discussion of physical ills? So might I, and in the discussion logically pertinent, touch every mental and moral sore in society. Mental, moral, and physical. Which is paramount?

The integrity of man will not permit us to separate into forces acting alone the influences of his life. So interactive are these factors that one may take any of them as the initial term and work out a scheme of sequence and dependence.

Whether as a positive fact sound health strongly predisposes to mental and moral sanity, it is beyond question that as a negative influence ill health is indescribably effective. To be spiritually clear in the presence of bad physical condition is only vouchsafed to the few uplifted. "*Mens sana in corpore sano*" is more than ideal. It points to a necessary relation.

Those of us who do not know by contact the facts, are apt to picture the laboring masses as strong and healthy, tough and resistant. The ideal worker is all that, but to-day the laborer who approaches that is either of the fortunate group whose conditions of toil are such as to permit such development, or of those who by primary endowment are able to thrive in spite of deadly conditions. But the multitude who, by reason of impossible conditions of work and abode, are crawling through life rather than walking, we only roughly realize, and the import of their condition almost escapes us.

How the race as a whole is to advance when it meets

so many factors of retrogression is, of course, a problem in proportion. That the element making toward degeneracy be made a safe minority, is obviously the only answer.

When we come to the practical struggle with the physical problems involved in the foregoing, we find two difficulties, either of which seems at first sight insuperable.

Lack of opportunity—lack of intelligence. Industrial conditions, the great battleground of to-day, will be bound to yield to the demand for betterment in almost all respects before any direct recognition of the physical needs of individuals is prominent.

To be sure, the advance made by the working class in the way of economic betterments does tend to greater opportunity, and in fact the soundest footing there is, for agitation of labor questions, is the effort to establish conditions that will give more latitude, more elasticity. It is imperative that all the time, all the strength, all the courage of men and women shall not go into the heartbreaking struggle for bare existence. Just now, for the most part, that is the case. The margin between non-dependence—I can not say independence—and pauperism is no wider than the day's work, and the day's work is the limit of capacity.

Recognition of this necessity is, of course, gaining ground rapidly, and the efforts at solution are embodied in all phases of labor strife, legislation and philanthropy. But it is only in the rarest instances that the gains in opportunity—the more elastic conditions of life—are turned to their intelligent ends. Perhaps we could regard with more respect the arbitrary designation of what are a day's work and pay, if there were any assurance that the freedom secured were of material benefit. But patience is the watchword, and freedom the battle-cry. Opportunity must come first, and industrial freedom, and after that a wider disposition of resources.

Especially is this true as related to the second great obstacle, the lack of intelligence.

Practical knowledge is a matter of education of some sort and from some source. The line of least resistance is the rut. It does not matter how deep or how crooked, it is easier to stay in than climb out. It takes time and strength and initiative to improve. Who of us, in material ways the more favored, does not realize the difficulty of gaining intelligence? Who of us in full days' employment has time to lay out and pursue new methods?

The State says to the laborers, "Your children shall not work before such an age," because the State can not be burdened with individuals who are "spent."

The immediate effect of that restriction is, upon the family economy, a measure of hardship, and it is only the more intelligent who welcome the law for its ulterior benefit. They have no time to spare, no margin in food, perhaps no hope.

The physiologist realizes that the food supply of the world is being wasted; that lack of knowledge in handling materials, mistaken ideas of physical necessity, habitual demands of no essential importance, make the food problem the great burden of the laboring world. Yet what time and contact have these same laborers to learn a better way? Shall our people learn it by the screwing down of the supply, lower and lower, by the increase of population as has come to pass in the Orient, or shall they have it by the dissemination and application of knowledge?

The hygienist sees the deadly pull upon the community of filth and crowded abodes. He can see pestilence the outcome of one; the melting down of hordes of valuable lives by insidious disease, the result of the other. Of what use is his most clear and authoritative dictum, even if it be accepted, unaided by other forces? For cleanliness and fresh air are costly; so costly that only by the wisest coöperation of public and private effort are they practicable.

Again and again progress is stayed by lack of coöperation on the part of the individual. He will not be made

to conform and he has no time nor way to learn to want to conform.

So preventive medicine lays its most sagacious plan; public health service institutes its salutary enactment; and it all fails in a measure of its legitimate success, to a large extent because the people cannot, for one reason or another, grasp the opportunity.

Although, under our own observation, public health matters are fragmentary and irregular and not by any means what they might be, yet there is a well defined trend toward intelligent intervention in behalf of the community.

That much can be accomplished, is beyond question. We have but to take the lesson offered by the Japanese in the present war, and if it needs emphasis contrast it with our own record in the Spanish War, to see that brains have to do with mixing even these colors.

It may seem a contradiction, but it is in fact more possible to have a sanitary camp, in spite of all its difficulties, than a sanitary city. The wisest and most authoritative of governmental regulation has not succeeded in carrying health into the crowded urban communities.

The reasons are many, but the foregoing considerations are quite enough to account for it.

In the nature of things it is not to be hoped that the problem of bodily health, and all that it is contingent upon, is destined to be solved by approaching it in the aggregate. It is distinctly and unchangeably an individual question. All that sanitary control can do now or ever, so far as our present light shows, is to remove or avoid overpowering obstacles to personal development.

And now I face the query, an embarrassing question from a didactic standpoint: What is the way to health?

Fortunately I have no theory to expound, to draw upon myself and it the attack of all those with similar theories. I am going to ask at the outset what we shall mean by Health. As we are in the habit of discussing these topics,

we are prone to confuse several ideas. We are likely to compare with one another unlike types, temperaments, stages of development, and above all, those whose life functions are not comparable.

Perfect health probably does not exist, and our standards are of necessity relative. We argue at one time from the standpoint of muscular power, another speed, another constitution, another form, and usually settle down for a final test upon longevity, too retrospective to be a fully satisfactory criterion for personal use.

So the thoughtful world is full of formulæ for health, covering, in one way or another, food, work, sleep, play, exercise, mental poise, moral control, and so on to an exaggerated development of systems.

Naturally the system has but a general bearing; cannot particularize except as the case arises. So we find at one period muscle building to be sought by men, women, and children. Again proficiency in sports, or athletics, or gymnastics, all following some notion of health that is too narrow for a stable or lasting foundation.

Even the criterion, longevity, will not do. I was once summoned in haste to an old gentleman, ninety years of age, who was in great distress in some digestive way. I said to him, "How long have you been suffering?" He said, "About fifty years." No one will dispute that longevity upon that plan is a bad hygienic test. Yet how many people go through life practically never well, and how few, how very few, know that clear, bouyant, efficient, habitual well-being that marks the best balanced physique.

Now you will note that I am not confining my attention to the poor, or starved, or overworked, or limited in any way. The world at large is under review, and the classes with every opportunity are open to the same description and to far graver criticism, than the masses who have no choice.

Grave criticism, I repeat, is the moderate indictment. Assuming that there is such a thing as moral obligation to

all in life, I do not hesitate to declare that the most signal duty of an intelligent human being is to be well.

That this is not purely a voluntary matter goes without saying, and that the approach to good health is not to an equal degree within the reach of all, is, of course, as clear. But that the endeavor to be as well as one's limitations permit should be a matter of duty, of conscience, and not a matter of comfort, whim, or convenience, I emphatically maintain.

I cannot too seriously or too unequivocally put forth the proposition.

With all the agitation of health topics that is current; with all the countless array of foods and garments, appliances and plans; with all the consulting of physicians and employment of therapeutics; the personal sense of *responsibility*, which amounts to a dominating influence in directing our physical lives, is lacking.

It would be extreme to say that all people are living unwisely in consequence. That is not the point. One can quite conceive of a well ordered and hygienic mode of life that is a matter of accident, or habit, or imitation.

The question is, How many live as they ought, because they ought, conscientiously accepting the problem as a specific duty and fulfilling it?

A general acquiescence in this abstract proposition would indicate that thinking folk see the matter in this light. The query is, Why do so few put into practice what they believe to be sound?

Two general considerations explain the failure, both of the willing and the thoughtless: First, it is not easy, perhaps not fully possible, to know what is the thing to do. Second, society has struck a key in the conduct of living habits, to which everything becomes tuned, and to deviate to any marked degree from the methods in vogue is a matter of the greatest difficulty.

Why is it not fair to presume that society has evolved,

for its own purposes and ends, a scheme of living that is in general sound and sane—that marks its conscious effort to adapt itself to conditions of civilization?

Certainly it would seem that that phase of evolution ought not to fail to justify itself. That it does fail to justify itself as to physical well-being is apparent to all students of the subject, and perhaps the broad reason is that it is not a phase of true evolution. The essence of evolution is left out, more and more as society “progresses.”

That essence is natural selection, the survival of the physically fit. In place of that selection has come everything artificial, irresistibly forcing into prominence and permanence factors and types not at all distinguished by physical perfection.

How can it fail to follow, that other ends determine means quite other than those adapted to the highest physical ends?

The result has been that the progress of the world is marked by a tendency to physical degeneration, especially in the non-laboring classes.

I am well aware that the element of manual labor is not the necessary distinguishing factor, but the phrase comes nearer to defining a line between the class, so absurdly called “upper,” and the classes which make up the great producing body, than any that occurs to me.

It brings one squarely to face this question of the upper class and its progressive tendency to become *unfit*. It is not necessary to undertake to demonstrate the fact. I have but time to discuss briefly the ethics of it.

If there is any justification of the existence in society of the extreme discrepancies in condition between the rich and poor, it lies in some interpretation that recognizes a right to the fruits of superior brain power. In some form and to some degree that distinction will probably always prevail.

The weak and vicious spot in the scheme as it exists is failure to couple obligations with rights.

If you have a right to the fruits of your intelligence,

what is to prevent you from becoming powerful to an unlimited degree?

Obviously nothing but conflicting intelligence, or a sense of obligation to your kind. The latter is the ethical note that is to be heard more and more clear in the future. It matters not for our purpose what it is or how it works; the necessary thing is that it be recognized as a fact qualifying all rights.

What right has a portion of the community to vitiate by its mode of life, voluntarily, its bodily integrity and that of its descendants? What right to dissipate through physical decadence the wealth of mental and moral superiority that is the legitimate product of generations of education and opportunity? What right has a portion of this class to hound itself to premature death by excessive ambition, or work coupled with unhygienic life, when its maturity might yield years of wisdom and moral impetus to the world? What right has another portion to sink into the dry rot of self-indulgence, yielding nothing but bad example to the non-discriminating envious?

It is upon such broad grounds as these that I base my statement that it is one's high public duty to be well. Am I overdrawing this picture? Do I imply a state of affairs outside the facts?

Look at the prevailing health conditions in the well-to-do. Mark the early going to pieces of business men and women. Examine into the significance of the constitutional diseases that predominate in that class.

Listen to the warning of the medical world which sees the preventability of the great majority of these ailments, and finally consider that these wrecks of lungs and livers, of hearts and kidneys, of brains and blood vessels, are in fact wrecks by the time they are usually discovered, and that most medical practice addressed to them is but patchwork, striving to piece out for a time machinery utterly spoiled.

This picture is not all so dark. There is a time when the

organs of the body are sound. With some variation there is a tendency to remain sound to a great age. With careful study there is a way to conserve this health.

There is a period when this care is as signally effective as it is useless after there have occurred indelible scars, and this age is from infancy to middle life. The world is beginning to take care of its infants. It exercises some supervision over its children. But the adolescent, the young mature, the middle aged, what of them?

Is it not the exception to find individuals who thoughtfully and conscientiously take up this problem as a serious and difficult matter? Who do? Those already impaired. Who do not? Those who are well and strong. Failing utterly to see that their vitality and resistance can carry them into abuses, tolerance of noxious agents, extravagance of resources, and accommodation to dissipation, and all with a devil-may-care indifference that invites retribution, they live by habit, imitation, caprice, not by thought.

Not only is this not an exaggeration, but it does not begin to portray the truth. It is time there was an awakening, and that health-care, plan, and practice should be a function of youth and health, not of age and decrepitude.

This is the view that is hard to impress. It seems unnatural that the young and buoyant should make a study of health, but let me impress the idea that it is not health that I urge as a consideration. It is vicious habits as a menace to health that I point out as worthy of incessant study, and as a postulate declare and then reiterate that many of our best established methods of life being physiologically most vicious, it is necessary that the whole subject be reviewed in the light of physiology, not fashion.

If it seems a far cry from weakling, pauper babies to dissipated and thoughtless youth, and that I have strayed from my subject, let me remind you of several facts:—

That the weakling babies are taken merely as a prominent and obvious example of the plainly unfit, whom we

strive to perpetuate; that they represent the whole class of feeble and indigent who are after all the grave consideration.

That the problem of dealing with the great mass is only partially a mass problem, and finally an individual problem.

That the scheme whereby some solution of this matter is to be reached must be radical and extensive.

That not only must there be brains applied to the solution, but intense conviction. That only can such conviction dominate in those who live by the word.

That the greatest mass of thinking, working, and efficient people with educated intelligence and rooted conviction, we hope is none too great for this colossal work.

That the hope of the world in this direction, in all directions, is in the force and energy of young men and women.

That the relatively efficient young men and women, instead of being to-day a rock to build on, are in fully as great need of succor.

That as poverty is the woe of the poor, abundance is the greater menace of the rich.

That as the poor are bound by necessity, the rich are enslaved by convention.

That it is hence a moral issue that calls on the intelligent classes to become leaders in the great work of reclaiming the physical barrens and pest spots, at all levels. That the initial step be with infants, but to stop there is not to help but seriously to damage the race. The school, the class, the club, the gymnasium, the church, the lecture, the demonstration, are all part of the necessary machinery.

The future will see the school of hygiene far more prominent than any other school of learning.

I am optimist enough to hope that it will see hygienic living a badge of intelligence and standing, and that there will be in time to come a dignity and power in leadership in this field quite commensurate with its importance as

the foundation of mental integrity and moral discernment.

But even this hope, based on the force of altruistic motive that prevails in the enlightened, depends finally upon the individual. Just as there is no hope for the control or coercion of masses in hygienic wants, so there is no hope of a comprehending and enduring organic effort to teach, except as it grows out of a true conception and a corresponding practice of individuals.

By as much as there is abundant moral ground why the ignorant, no matter how needy, should decline dictation as to personal choice and conduct, by so much is there an imperative obligation upon the intelligent to enlarge the influence of the truth by personal example.

No movement or belief ever became a fixed and dominant factor in the social structure, upon a basis of enactment.

The invisible, insidious, subtle contagion of thought is what molds public opinion and conscience.

Is there any reason why that permeating process should be confined to political or industrial reform, while the very foundations of mental and moral sanity are tumbling?

It is true that, for the overburdened mass, opportunity must come before they can move or adjust, but it is also true that, if their opportunity were to come to-day, there is no prevailing plan of hygienic living for them to adhere to.

Is the prospect hopeless? Is it worth the struggle, or, if worth it, can the end be accomplished?

To those who realize the difficulties the task is enormous. Those who say it is hopeless, hence useless, are those who say all progress has come through war, hence all time will see war; all government has been dishonest, hence all time will see it dishonest; and so on through all the list of conspicuous human frailties.

But there are those who believe that history need not repeat itself forever, that there is a future for the race; and to those courageous I have but one word to say, Begin at the beginning.

Delivered, Chicago Literary Society, April 15, 1907.

THE DEVELOPMENT OF THE CONCEPTION OF PHYSICAL WELL-BEING

LOOKING over the field of physical activities of American youth, one must be impressed with the enormous energy and wonderful skill developed in almost every direction by those who are performing exploits, which we group under the general term of athletics.

No description will do justice to the ambition and courage which stimulates to really great achievement. The tendency spreads with great rapidity, and, from the village green and the city back-lot to the most finished gymnasium, we find pouring forth streams of physical prowess wonderful in amount and marking an unmistakable quality in its mental, moral, and physical bearings.

To underrate the developmental value of these activities from every point of view is to ignore the fine adjustment between pride of achievement, vigor of body, and fidelity to the rules of the game.

No one can carefully regard the beautiful specimens of physical development shown by men and women in these endeavors, without feeling that the nobility of the race and its possibilities through physical perfection are things to be zealously cherished.

Without cavil, let it be remarked, however, that the present status has been evolved, not only out of an innate thirst for contest and natural rivalry, but in response also to an ever increasing demand on the part of the populace for amusement.

The growth of professional athletics proves clearly enough that the factor of amusement tends to become predominant, and careful scrutiny of the athletic world will show a variety of undesirable elements which creep in in response to this spectacular feature.

Whereas the total number of performers increases enormously under this stimulus, the creation of a standard of excellence, attainable by a comparatively few, has a distinctly inhibitory influence at a certain point upon universal development.

The high degree to which the factor of entertainment enters tends to make this standard more effective. When one pauses to take an observation as to the progress which the race is making in physical development, he is bound to consider the influences bearing upon this evolution.

It is fairly to be assumed that magnifying the physical power under the guise of athletics will inevitably develop a large body of athletes. There, is, however, a large question whether physical capacity and bodily perfection are thereby correspondingly dignified, and hence considerable doubt whether as a permanent and imperative force the athletic type is to be relied upon to draw the race on to its physical optimum.

Let us candidly answer the question, Is the motive behind athletic achievement, love of contest and thirst for victory, or is it intrinsic desire for self-development?

Upon the answer to this question must depend our conclusions as to the final adequacy of our present method as a means of protecting the physical well-being of a people.

Permit me a moment's divergence.

No one would imagine that originally horse racing was intended to be anything but a sport, as natural and unobjectionable as any other.

It was only as it grew to be a pursuit involving the use of men and resources to a large extent that the notion of its favorable reaction on breeding was urged, and it is only since it developed into so furious a business that it has failed to exert upon the horse industry some favorable influence.

To be sure, as concerns the development of speed in the horse, there is no doubt that the business of horse racing

has been the one determining influence in a phenomenal development. But as concerns the establishment of good and stable lines of breeding from which shall spring animals of greater utility and perfection, it has had a distinctly deterring effect. All considerations having been subordinated to speed, it follows that the essentials, of far greater value to the public than speed, are gradually dissipated and the available stock of good horses markedly deficient.

Theoretically, this need not have been so. To have carried along a well balanced plan, wherein speed should have had its due importance, would have been possible and sound. But the explanation is in the psychology of the thing.

Thirst for victory, the intoxication of contest, pride of ownership, came to dominate the intelligence and effort of those involved and the deeper needs and purposes were lost to view. If speed had been sought in the product only in its proportion, the whole method would have been different and the total effect on the industry beneficial.

The idea that dominates is a race horse, good, bad, or indifferent, but a race horse. How far this has operated to retard and limit the development of fine stock is a matter of conjecture, and perhaps of difference of opinion, but I am satisfied that in certain respects vital to the matter it has so influenced the outcome.

Now this is a problem in which the terms are essentially under control. The individuals in question are bred, reared, selected, trained, and utilized with no restraint upon choice and judgment. Even the breeder, as a rule, would deny that his aim and plan was to produce speed, yet, at bottom, almost unconsciously that is the line upon which his effort proceeds.

Out of thousands but one great racer is born, and yet with all the commercial pressure that belongs to the matter of value in the rank and file of utility horses, the gaze of the breeder is still fixed upon speed.

Whatever may be the fate of the horse industry, I cite this to illustrate, first, the effect upon a great industry of an intercurrent idea, and second, the difficulty of substituting for a primary and so to speak human impulse an academic design.

When the lust of preëminence, concentrating all energies upon a winner, becomes so great as ruthlessly to sacrifice the mass out of which the prodigy arises as a specialized offshoot, the good of the process to the mass disappears.

The analogy between this illustration and the subject that I am discussing is restricted, but at a point definite. Specialization, selection, and forcing, having as an end victorious contest, can react as a developmental influence to the advantage of the mass of individuals only in so far as it combines some effective stimulus and opportunity to the more limited, and when it by chance creates conditions that interrupt stimulus and restrict opportunity it becomes increasingly a bar.

These are essentially the factors in the problem of American athletics to-day, barring any opportunity to control the product by breeding.

Let us take athletics as organized in our colleges as a type.

Right at the outset I might as well meet my disputant, who will deny that the end of athletic method in college is to produce *winners*.

I can only affirm, and maintain by reference to common observation. No one can fairly weigh the facts and fail to reach that conclusion.

Irrespective of the moral obliquity, the intrigue and chicanery that creep into the practical operations of the machinery of winning contests, the thing itself in its narrowness of specialization is an inhibitory influence upon the conscious and intentional culture of the great mass of students.

What happens? At the beginning of a student's career, the question very promptly arises, Is he or is he not given to athletics?

Under the present phase, a very large percentage, I think the majority, of students are by that test tacitly excluded. For those who are or who would like to be athletic, the following course is open:

According to the season of the year, the makeup of the various athletic teams is in progress. Scores of youngsters get out in various performances to be inspected and tried out for positions on the teams. Week by week this list dwindles as here and there a man is picked up who is signally proficient. In the course of time, the teams, including substitutes, are rounded out. So far as the individuals who are successful in making the teams are concerned, there is lacking neither stimulus nor opportunity. They are put through a curriculum, more or less severe, more or less judicious, and brought from time to time into strenuous contest. Of course, in their practice contests it is intra-collegiate. The ultimate purpose, however, is inter-collegiate contest, and to this end all energies are directed.

Nobody can question the high degree of physical development, and I will even consider mental and moral efficiency, which can come to these individuals as the result of their experience.

No one can question the degree of enthusiasm and the intensity of interest and the eagerness for victory which concentrates upon these teams from the whole college body.

I think it would hardly be worth while to discuss the truth of the theory that hereby an overwhelming *esprit de corps* is developed.

Supposing that to be conceded. How much does it all bear upon the point, namely, the physical education of the students of a university? First, let us examine somewhat the curriculum of the team. Its required habits are exemplary; smoking, drinking, and dissipation are forbidden.

Certainly the implication as to the physical value of abstinence ought not to be thrown away.

Upon how many of these participants is the lesson at all effective? How many of them regard it as anything but a means to an immediate end rather than as a suggestion for life?

Even limited observation answers that question unequivocally. These team men are put through a hard physical drill. To what extent it is extreme, may be a question. Beyond doubt many individuals, who are physically unequal to the test, are injured, but without insisting upon that point, let us assume that they have a fine curriculum for physical development.

To what extent do they acquire methods or habits of life based upon physical exertion, which they incorporate into later life and utilize for their own and others' benefit?

Again, limited observation leads one to the conclusion that it is exceptional when a man of this experience is a man of wise physical habits in subsequent life.

Many of these individuals are fed with care upon certain definite lines.

It has become perfectly clear recently that the hypothesis upon which the training table has been conducted has been wrong, and there can be no doubt that so far as the influence of this feature upon college intelligence goes, it has been in the direction of misinformation and almost ineradicable error.

However, it must be admitted that, on the whole, if the students who become participants in athletic contests derive a preponderance of benefit, it is by no means commensurate with the opportunity existing.

What on the other hand is the effect upon non-participants?

Perhaps it will be said, not any. It may be said that colleges require compulsory gymnastics for those who do not "make" the teams; that this occurs under supervision

and that the general drift is toward physical improvement.

It is true that most colleges have some gymnasium requirement and that a considerable proportion of students do something at it.

My observation and inquiry lead me to the conclusion, however, that it is desultory, more or less interrupted, and without any definite plan of physical culture.

The stimulus to marked physical exercise has been interrupted by the limitations upon the numbers who can compose a team.

The notion of conspicuous contest and victory having become the prominent and determining motive, it follows that the incentive to the less capable students is gone. There is no place to show. There is no *eclat*. There is no decisive issue. Hence, what is the use?

Stimulus has disappeared with opportunity. Whether one can declare that it is the result of this, or not, one can declare with fairness the fact, that the general physical quality of college students is far below its normal possibilities, and almost every individual can be strongly criticized in some direction or other as to his physical life.

It might be objected that it is absurd that the mere lack of exhibition opportunity should snuff out the natural impulse of youth to physical growth; that it is crediting youth with altogether too small initiative and principle.

It must be borne in mind that the youth in question is at the most impressionable age, most susceptible to strong suggestion, and that gregarious youth is as resistant to force and as hopeless in its inertia as anything that one can picture.

What can be done with youth, can be done only through ideals, never through coercion, and it is the ideal in question with which I contend; and this leads me again to call attention to my statement. Not that college athletics do not adequately foster physical education, but that they are distinctly a hindrance thereof.

So long as the ideal is as it is, so long as college supremacy is the rallying point of athletic spirit, and so long as *extraordinary* prowess is the chief pride of the student body, so long will the physical education of men fail to bear its legitimate fruit.

Let us acknowledge that a small percentage of men are physically so endowed that they could become in any reasonable sense athletes. Let us admit that the great majority of students must of necessity fall short of anything approaching a contesting grade. After all, does not that again open the question, which is to my mind the crux of the whole matter, whether we do not entirely fail to realize the difference between that over-development, which is covered by the word athletics, and that normal and symmetrical development which might be covered by the word gymnastics?

I repeat, this is the crux of the whole matter.

There is no individual in college physically so limited that there is not for him a degree of physical improvement and perfection distinctly better than he attains.

From the weakest to the strongest, the poorest to the best, the most struggling physical economy to the most perfect, there are possibilities of physical improvement, through intelligent and judicious effort, which could largely determine future physical life.

It is perfectly evident that from this point of view we see an entirely new territory. Viewed as a cultural matter from the standpoint of individual profit, as should be viewed every item in the college curriculum, the subject gains importance and dignity.

If it be true that intelligent development can correct vicious physical tendency, fortify feeble physiologic power, and stimulate desirable and pleasurable hygienic habit, there ought to be no question as to the imperative necessity of including in our scheme of education these profoundly influential factors.

That these things are true I have no time to undertake to demonstrate, but without hesitation or qualification I assert them.

All physical trainers and students of the subject know that it is true. As a rule college curricula take some cognizance of the facts and are measurably adjusted thereto.

Why, then, is it that so little is accomplished and that the drift is not noticeably toward better things?

Again I invoke the influence of ideals. The notion of physical perfection has little ground in our modern conception. The obligation of an individual to be at his best physically is hardly recognized even by the most intelligent.

That a man should make the most of himself mentally or be punctilious morally is a well settled principle of life, but that he is under obligation from an ethical standpoint to make his physical life as good as possible rarely enters the mind of anybody. It is this that is the foundation of the whole argument.

There must be introduced into the lives of young men, and especially college men, a new ideal as to physical ethics, and out of that, and only out of that, perhaps, will spring the reconstruction of the general conception of this matter, by the people.

It seems to me that the attitude and conduct of colleges in this field ought to be a determining influence upon the general public. That the general public is suffering from the same perversion of physical ideals, is clear enough.

To what extent this is due to college example is questionable, but that college example, as a high-grade demonstration of the true course, could and would react favorably on the general public, I believe there can be no question.

Two things make it imperative that colleges should realize this necessity. On the one hand, their students have none of the corrections of normal and necessary labor leading them to more or less automatic cultivation of the physique. Hence schools fail in immediate obligation.

On the other, the educated minority of society owes an obligation toward the elevation of standards and methods so clear that it would be trifling to discuss it.

No one ever questions the obligation which rests upon the more educated and enlightened citizens in the upholding of standards of living, individual and public. I question, however, whether it ever occurs to these presumably enlightened that they have a function by precept and example in molding the public conception by hygienic living.

What, then, is the solution of what seems to be a present and progressive vice in the physical life of the college?

I recall my own most intimate observation in passing.

Where I was in college, there were no athletics; no football, rarely baseball, no track teams, sporadic boating, no athletic contests of any kind. So far as I know the students were of average physical condition, to a large extent men of moderate means, many of them coming from the strong physical experience of the farm. Such a thing as a noticeable group of physically superior men was hardly considered.

Of course, in a college body so made up, the dissipation of the students on the average would be small. On the other hand, in the small group whose circumstances would permit it, the average dissipation was great.

Since that time there has grown up in that college a strong athletic spirit. College achievement and college supremacy have reached their highest pitch in the student enthusiasm. Noticeably, athletic politics and athletic intrigue have at times reached their most obnoxious development.

So many changes in the material circumstances of the student body have occurred in the few years in question, that it would be unfair to compare habits or draw conclusions therefrom, but as concerns the physical development and personal quality of the student body, so far as I can learn, it not only has not improved but has rather deteriorated, and this in the face of the fact that it produces teams of the very first quality.

The college can go insane over an inter-collegiate contest, and almost nothing can be done in the way of systematic student training.

This only serves to emphasize what I commented upon with regard to horse racing; one cannot force upon a process, like horse racing or boat racing, an arbitrary and really foreign ulterior purpose with any hope of success. These contests are not the expression of an elevated physical development in the bodies from which they spring, but are examples of more or less fortuitous specialized and adapted capacity.

To cater to the supply of these qualities is, in the first place, to lose sight of the primary object, physical perfection, and in the second place, to eliminate from the developmental curriculum upwards of ninety per cent of all the individuals available.

Students must remain students. Contests must remain contests. College pride must stand for what it is, but the physical progress and culture of mankind has got to proceed from foundations entirely different, under ideals far higher and more imperative and, to repeat my language, by methods conscious and intentional.

When this readjustment can come to pass, it is safe to say that college teams and college sports can be affected only favorably thereby.

Until it comes to pass, and while the athletic ideal remains in its narrow specialized and unintelligent form, college athletics will continue to be, as in my judgment they distinctly are, a means of diverting from normal and desirable development the energies and purposes of that great mass of maturing men and women upon whose future is dependent the welfare, to an immeasurable degree, of the social body.

What is to be done in these conditions is quite as serious and difficult a problem as any that faces the college authorities.

The facts are well recognized; the solution is not clear. Perhaps the most difficult element in the case is the necessity of fitting or acquiring a taste on the part of the students sufficient to outweigh the various interferences with normal physical ways which life presents.

It is curious to note how greatly lack of experience and opportunity has to be misinterpreted into an apparent distaste.

It is rare that any individual takes up any form of physical exertion without finding in it a distinct pleasure corresponding to its benefit. The history of golf in its relation to staid and hopelessly inert business men, or to sluggish and over-domesticated women, is an excellent illustration. The combination of a stimulating out-of-door life, coupled with some interest in achievement, proves to be fascinating to those who supposedly are rooted in their abnormal civilization.

The history of men who have taken up various forms of outing, oftentimes, reluctantly and with misgiving, but almost invariably with resulting fascination and delight, shows clearly enough that lack of comprehension rather than lack of taste is the fundamental fault.

The observation, open to the few physicians who take any stock in that sort of thing, of individuals who are put under systematic gymnastic training as a measure of medical treatment, shows beyond any doubt that even this restricted joy has in it as a rule definite pleasurable result. The difficulty with all of these questions of pursuits is not their distastefulness but the complexity of life which tends to crowd them out.

Only by giving essentials their proper weight can the relative adjustment of time and energy be secured. If by chance we could come to be as insistent upon our needs for physical activity as we are for our food, the problem would be solved.

It is clear, therefore, that the difficulties with respect

to the college years are great. To arrange college life so that normal and fitting physical activities become a part of its contribution to the welfare of mankind may not be solved. It ought to be possible, however, to prevent it from being an insuperable bar to future education.

I think it is agreed that college sports should become more diversified, that there should be forms of play to which all students could have access and for which they could be reasonably fitted.

Read the old Rugby tales of football and compare them with the modern football performances. Take, for example, the so-called Soccer football, which, rough and strenuous as it is, after all puts a premium upon agility and courage rather than upon strength and bulk.

There is no end to this possible development of sports, in some phase and by some arrangement of which all students can be fitted, providing one can check the concentration of student thought upon a handful of prodigies called a "team," which may be able to win a game from some rival.

Even this, however, does not adequately meet the conditions. The contesting age in strenuous sport is over, comparatively early. The contest in public is practically over at the end of college life.

What has the student acquired in the way of physical tastes which shall lead him to go on cultivating his bodily powers, adapting himself from period to period to the proper activities? I think it must fairly be said that he has acquired very little.

If this important four years, which might yield such great results, yields only indifference, to that extent it is a reproach to the intelligence of our educators.

I had no intention to preach a sermon in hygiene, but one word I feel is due. The habits of a man at thirty bear fruit at fifty. The changes at middle age and beyond, which have become so marked that they bear the names of

diseases, are really terminal and indelible scars for the correction of which no one is able to do much. Morbid processes of the destructive type are hidden and rarely bear an obvious relation of cause and effect.

Not infrequently the period of highest physical stimulation and sense of well-being immediately precedes a bodily storm. All manner of obscurity and confusion surrounds these topics. To be governed in one's plans about these things by one's present feeling is fully as irrational as to be governed in one's fire insurance or life insurance by a sense of present security.

There are laws of hygiene as well established as almost any other laws of life, but the average man, doctor or layman, rarely gives them thought. We are creatures of imitation rather than of intelligent action, and it is likely that habit will always determine the average status of civilized people. It becomes, therefore, the more imperative that habits, based upon sound principles rather than emotional extravagance, should be inculcated in youth. Yet it will be a long story before what now constitutes the spirit of college can be transformed into a pervading pride in the physical perfection of its student body.

Is it visionary to hope that determined effort on the part of educators at all stages can favorably influence this development?

Is it useless to try to impress the importance of this matter upon those who are engaged in the training of youth?

Is there any fallacy in the argument in favor of an ideal conception of physical well-being?

To all of these questions I answer, emphatically, No!

We do need an ideal in physical education. Not only educators, but all serious thinkers admit these essential propositions.

For those two reasons it is clearly within a reasonable hope that our educational forces will before long determine a standard which will be to the race an unmitigated blessing.

Delivered, Commercial Club Banquet, January 11, 1908.

TUBERCULOSIS

THE committee entrusted with this program has chosen to concentrate the discussion upon the subject of tuberculosis. Amongst many reasons for this, there are four which are important:

1. Tuberculosis is a form of infectious disease not obvious, but by reason of general discussion greatly distorted in the public mind as to the nature of its dangers.
2. Because it represents to a high degree the principle underlying our management of infection, viz., that intelligent effort put forth at the proper point practically removes it from the category of diseases which are a public menace.
3. Because of all the diseases with which we have to deal from the standpoint of the community, there is none which is more important in bringing about conditions of dependence and pauperism, with which are associated all great philanthropic problems of the day.
4. Because to a degree hardly equalled by any infectious disease, it is amenable to treatment, but to early treatment only.

It therefore seems that the earnest and determined interest of this body of men can with propriety focus upon this point for the time being. It is not my purpose to discuss at length the broad humanitarian aspects of tuberculosis, nor to point in effective colors the infinite woe which it brings into the world. It is worth a moment of time, however, to note the widespread agitation traveling over the world upon this subject, and to inquire briefly into its reasons.

Educational effort starting in a few places, spreading through the medical profession out into the bodies interested in similar topics, and again out into the people, has gradually brought the majority of the civilized communities

into considerable recognition of the great facts of tuberculosis. Line by line and point by point this lesson has been brought into the field of general intelligence, until there has finally come to exist a familiarity with the fact of tuberculosis even though the nature of it be somewhat vaguely understood. Hence, the first factor in this world movement is *comprehension*.

Inevitably, in the progress of such a wave of intelligence, the attention of the people, whose minds reach out into community problems, has been attracted. They have seen that there exists in our midst, in the midst of every civilized community in the world, a grievous plague, that it is the source of indescribable distress, incomputable economic loss, and unmistakable danger to this and succeeding generations, and above all, that it is theoretically possible to remove it from the field of human disaster.

Upon all these propositions, as a foundation, the aggressive workers in the medical and philanthropic field have become imbued with the belief that among the world problems which demand attention, none is greater or more imperative than tuberculosis.

Following upon all this development of opinion comes the practical demonstration, fragmentary, imperfect, and piteously small, but none the less clear, that it is possible practically to cope with this question. Out of this has arisen what is necessary to stand behind every great and permanent movement, *conviction*. Such conviction having been reached, it is as true here as in every field of human thought and endeavor, that it is impossible to stop the determined impulse to combat this public foe.

Upon all of these phases one might comment at great length, but time forbids. The questions which we want to consider are few and definite.

In this community, with reference to this body of business men, with reference to the body of professional men, with reference to the social, domestic, and economic life of

this whole people, where does this question stand? Should we consider it from the standpoint of the danger that exists for every one of us and our children, or shall we discuss it from the standpoint of the enormous body of suffering human beings who are already in the toils, or from the standpoint of the State which is being deprived of its citizens, or from the standpoint of the relief forces in the community which are carrying on the burden of this disability?

Upon any one of these aspects one might talk with fervor, indefinitely. It is impossible to more than touch upon them. Let us glance, however, at the actual charitable problem.

It is well known that accident and sickness cause the vast preponderance of dependence in the community. It is probably not so well known that an analysis of the facts concerning large bodies of people who receive relief will show that in 10 per cent of the families so relieved, there is tuberculosis. Of the families making up this 10 per cent, over 75 per cent will involve either the father or the mother, and so far as my present information goes, the disease of the father preponderating over the mother in the ratio of about 4 to 1. This means that with very few exceptions those families are permanently in need of public help. Of the members of these families, 23 per cent will show tuberculosis in some degree, and yet in only about 4 or 5 per cent of the families immediately under consideration have there already been deaths.

This latter fact is of great significance. It shows in the first place that this is not a progressive performance, going on from generation to generation and following the family from point to point, but it shows that it is springing up anew in families previously immune, and so far as we can see, for no reason other than the social and economic conditions under which these people go on. It shows, moreover, that this is not a sudden blow that falls upon the family and is over. It is a continuous burden which goes on and

on for months and years, and which in any event becomes a source of financial burden, and in the case of the father or mother, a matter of hopeless struggle.

An analysis of a large number of typical cases of tuberculosis in the man of the family will show an average reduction in wage from \$13 a week in health to \$4 a week.

Bear in mind that in this consideration we are not dealing with the dregs of the community. We are dealing with the best of our industrial people; the people who have worked hard to advance themselves; who have in consequence had to labor unduly; who have assumed responsibilities and carry them to the last minute; who are forced by absolute necessity to drop down and down in the scale of living.

Even amongst the recipients of relief, living conditions are not the worse. In a group of cases under analysis, there was something more than an average of one room to two people. These are people of more or less delicate stripe, many of them unaccustomed to hardship and unfit for the heaviest labor, but who are brought day by day and month by month into the most dire conditions.

One sees all phases, but almost invariably they respond to the same test. Would timely help have avoided the situation? Almost invariably the answer is, yes.

I approach with diffidence the next question: the economic value of a life. I hesitate partly because one dislikes to put too much stress upon that phase and partly because the statistics upon this subject may be open to question. However, let me say in a word, and roughly as to accuracy, what the statistician would say:

In Chicago, in 1907, there were 3,477 deaths from tuberculosis. Assuming the value of an individual life to the community to be \$1,500, which is the economist's assumption, these 3,477 persons are worth to Chicago \$5,215,000; the expense of carrying them through their sickness on a 270 days' average was \$675 apiece, including

loss of service during that period. It makes the expense account \$2,355,000; a total estimated loss in one year to this community of \$7,565,000.

I shall not stop to discuss any fallacies that may lie in this argument. There is enough truth to it and it is sufficiently accurate to show that the actual waste of resources in this community, due directly and indirectly to consumption, is colossal. This is worth bearing constantly in mind. I desire to emphasize it for one specific reason: the impulse to step in and relieve this situation is greatest from its humanitarian side. Everyone of you is stirred most deeply by the knowledge of suffering and distress of your fellowmen. On the other hand, I think history will show that plans of relief and methods of remedy are more stable, more cogent, and more easily established from the economic side, and it is obvious that it is an important factor. But again, we must face the picture of the suffering surrounding the situation. The heart-rending struggle of the breadwinner to keep up; the mental anguish he suffers as he sees the fight going against him; the actual suffering of himself and his children; the long drawn out period of hopelessness; the enormous risk of infection to the other members of the family, and the cumulative probability of disease from exposure, starvation, and discouragement; all of these things can be put truthfully into a picture so harrowing that even the hardened medical man can scarcely face it. Time forbids me to dwell upon it.

Finally, we must face this fact: the tendency of this disease, of course, is to develop in unhygienic conditions, in the congested districts; the tendency, moreover, and this is a most pathetic fact, is for the disease which develops outside of those districts, of necessity to drift into those districts. The result is that as long as we have congested districts undealt with in this direction, so long shall we have a focus of tuberculosis from which will emanate constantly and unavoidably the infective germ which scatters itself

through every avenue of city life and into every spot, no matter how hygienic, establishing relations one way and another with every level of society. A good neighborhood, good household, good living conditions, and wholesome occupation, are no protection against this factor in the question.

Remember that I have said a tubercular patient in any stage need be no menace to people living in the same room, and remember also that a tubercular patient in an advanced stage, uninstructed and unsupervised, is more or less a menace to everyone who lives within reach of the wind that blows past his door.

Something must be done about it. The workers in this field know no discouragement. They have seen three things: that the dangerous, advanced consumptive can be taught not to endanger anyone, that consumptives taken very early can in a great preponderance of cases be saved, and that the members of the community particularly exposed to danger can be effectively protected. All this they have seen and the effect upon the aggressive force is to inspire them with *courage*.

There is a way to do it. The problem is simple of statement: First, get into immediate contact with the situation, the sick and their households. Second, develop the simplest practicable method for dealing with the various types. Third, bring to bear upon the situation, as it exists, intelligence and money, and the problem is on the way to solution.

The work will take a generation or two or three, but whatever it takes it will have more than paid at every step.

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SOCIAL ASPECTS OF TUBERCULOSIS

THE work in the tuberculosis field naturally divides itself into three categories more or less distinct: *first* the development of the scientific facts under the guidance of pathologists, coupled with clinical effort appropriating and adapting for therapeutic purposes all of the accumulating data.

When one considers what has been accomplished since 1880 in this direction, it seems as though we were surely approaching a fundamental conception of the strife between the parasite and the organism. For practical purposes we certainly have an abundance of valuable data. It must be borne in mind, however, that the whole subject of the reaction of the human organism to the hostile parasite is under careful investigation and review, and that our conception of tuberculosis will have to follow the developments of knowledge in respect to these deep physiologic problems, perhaps to the point of entirely altering what is now reasonably fixed scientific dogma. Our great advances in therapeutics have not been entirely due to this increase of accuracy in our scientific concept.

In certain respects a knowledge of the true nature of tuberculosis has been an aid in the combat against it as a general proposition, but the present stage of therapeutic efficiency is the result of scientific effort, clinical rather than pathologic.

Therapeutics is, as it has always been, essentially empiric, and whether we shall ever see the time when it is not so is conjecture. Beyond all question the plan of treatment now approved is the result of painstaking and determined experiment, based upon close observation and wide

interpretation of strictly clinical facts. Wonderful as the improvement has been in the method of procedure, it is far less the result of scientific acumen than it is the fruit of determined and devoted service on the part of physicians more humanitarian than technically scientific.

So great has been the growth in recognition of the tremendous importance of tuberculosis to mankind on the part of the medical profession, and coöperation with them on the part of the people at large, that a wave of resolution to combat the evil, unprecedented in the history of mankind, is sweeping over the world. The sense of obligation to those whose life conditions make them, on the one hand, unduly exposed and, on the other, hopelessly restricted in their ability to put forth individual correction, has grown to the point of imperative impulse and is driving the public on to some beneficial result.

As a phase of this movement comes the necessity for organization, and the *second* category into which the work falls is that of systematic propaganda. Into this field drift the laborers who have talent and taste for organization, and, although it is obvious that a great deal of effort might be frittered away on the mere framework of such a structure, and although it is easy to lose sight of the real object in the interest as to plan, machinery, office-holding, and public prominence, it is yet to be borne in mind that the comprehensive achievement in this warfare can not take place without the highest development toward perfection of this same machinery. It must not be forgotten, however, that this machinery is not only not strictly medical machinery, but that it is only casually and to a limited extent at all a medical matter.

However possible it may be for the profession to organize and develop these instrumentalities of propaganda, the product of their activities is bound to be of much broader relationship. After all has been determined that can be by the medical scientist, after all the organization plan

that it is desirable to outline has been realized, there still remains the *third* problem, how to bring to bear upon the masses of people in the world the knowledge and facilities available for their succor in their dire conditions. How to generalize, for the benefit of the race, specific knowledge, how to distribute to the many the special advantages formerly available only to the few, is a problem in sociology, and that means not only a task which can not be solved by physicians as such, but which can be participated in by them only in so far as they make themselves sociologists.

According to our present light, the technique of management in any given case of tuberculosis is reasonably well settled so far as the method of election is concerned, but what may be determined as the minimum in point of facilities, cost, and attention, maintaining at the same time efficiency, is as yet more or less open to question. The present conception of a perfect régime, whether prophylactic or curative, in spite of its simplicity of principle, is exceedingly complex in its broader relations as to practicability.

It is perfectly obvious, however, that the success of any movement, considered from the community standpoint, is going to be limited by considerations of feasibility. Not only must the social conditions in which the community reposes be molded, adapted, and perfected, but the determination as to the essentials of management of this subject must proceed to the fullest possible extent in the direction of simplification.

The problem of combating tuberculosis in communities presenting comparatively small groups of indigent families is really simple. It requires nothing more than a determined, intelligent effort on the part of the forces working to that end. The sparseness of population, the accessibility of open spaces, the comparative cheapness of supplies, and the lack of enormous "group inertia" pertaining to masses of people, all offer features of feasibility and ease of

management which grow progressively less as the mass in question becomes more dense.

It is only necessary to contrast the problem presented by one city tenement, with such conditions, to see, at a glance, the task is inexpressibly greater in the large city. It is not merely a question of larger numbers; it is a question of absolutely different conditions of living, involving not only industrial pursuits, fixed styles of habitation, and utter absence of open-air facilities, but it involves that great and intangible tenacity of choice found in the masses of people, whereby they apparently prefer conditions of discomfort and squalor to conditions of more sanitary character, which is not at all a matter of intelligent choice upon their part, but a fixed, underlying, psychologic factor recognized by all sociologic observers in their efforts to institute even practicable reform.

These facts make the city problem complex to the last degree and yet the more imperative, for by no possibility can the interests of the intelligent and amenable of the body politic be safeguarded without reckoning with and mastering these lower elements in the community.

The problem is not a mere question of saving the lives of so many poor and ignorant; it is the problem of rooting out and exterminating conditions which continue to breed disease and to serve as a focus from which dissemination to the entire body is inevitable. So far as the determination as to the greatest possible simplicity goes, it is as desirable for the small group as for the large one, but the methods whereby the warfare should be carried on are utterly different in the two cases.

The greatest advance toward practical solution has come with the recognition of the fact that radical climatic change is not an essential. It has been demonstrated over and over again that the arrest and cure of a tubercular process is entirely practicable in almost any climatic conditions. Let us not waste time over a discussion as to whether there

is a better or worse climatic setting. The fact is, that radical climatic change is impossible for any but a tiny majority of the patients, and is, therefore, to be set aside as of no practical importance in the light of our recent experience. The same can not be said, however, as to the relative necessity for clean air. What a pure air is, is not easy to state, but that pure air is better than polluted air is beyond question, and that the way to offset the impurity of city air is by providing unlimited access to such air as there is, is also clear.

It is obvious that under present conditions, at least, most of the tubercular poor have got to be cared for under some conditions other than hospitals or sanitariums afford. There is no immediate prospect that such facilities will be offered nor has the day yet arrived when incipient patients from these classes could be induced, as a rule, to go away for sanitarium treatment. All are agreed that tuberculosis must be met where it is and that some conditions must be established which will accomplish adequately two things: first, education of the individual as to his needs and possibilities; second, an opening for him through which these can be attained.

Although as an industrial question the living wage and its bearing upon food is of paramount importance, and for that reason becomes the corner-stone of any structure which may be permanent, it is, after all, true that food, irrespective of wages, is the most possible element to supply through philanthropic effort. This really is a mere question of money and sufficiently intimate supervision.

The question of habitation presents the real difficulties in the matter. Though this has a distinct relation to living wage as a broad proposition, it is not as susceptible of adjustment and solution by far as the food question. The individual child, for example, can be fed quite irrespective of the family feeding. It is rare that it can be practically housed at a distance. It is, however, true that such an

individual in the family must be housed differently, even though in the same habitation, and how to create out of a tenement mess a hygienic corner is the great problem involved in this matter.

The difficulties are less in cases which are sufficiently early or mild to be ambulatory. The necessity for a combination of perfect rest and fresh air, which modern therapeutics recognizes, taxes the ingenuity of the physician working in this field, to the utmost. It is, however, also true that even these forlorn conditions can be combated and in a large measure overcome by sufficient determination.

Again let me call your attention to the necessity for simplification to the utmost degree of our demands as to therapeutic necessities. Once we have determined what are the essentials, and have further determined that those essentials can be attained in conditions presenting a certain minimum of facilities, we have established a unit of therapeutic procedure. This may be regarded as a medical determination. The problem of installing efficiently that unit in the thousands of spots where tuberculosis exists, is a problem for the sociologist. The machinery necessary to achieve this must be the outgrowth of years of effort from countless workers approaching from all directions, but focusing upon this point. The foregoing brief suggestions bear particularly upon the treatment of those actually involved in the disease.

The greatest problem of the future in the tuberculosis crusade, because the one fraught with the most possibilities, is the problem of prophylaxis. What is to be done to render the chance of infection less? Here we encounter the intricacies of the social structure manifested to a highly multiplied degree. With those diseased we are dealing with, after all, a fraction of the community. For the purpose of influencing those not diseased, we are dealing with conditions involving practically the entire mass of people. No one can know what individual is especially in need of

protection. No one can at present hypothesize as to the susceptibility or probability of infection. The necessary prophylaxis must be universal and, of course, opens the whole question of the physical habits of a people.

In order materially to influence this question, we find ourselves plunged at once into the depths of difficulty presented by the conditions of the industrial classes. The well-to-do, no matter how unhygienically disposed, are nevertheless to be reached by enlightenment and are not hopelessly barred from the fruits thereof, but conditions of living which stand in conflict with hygienic possibility, and which are the result of fixed industrial and social institutions, must be modified to whatever extent is necessary before this achievement in preventive medicine can be conspicuous.

In common with all questions involving the amelioration of conditions in which the industrial classes live, and particularly involving the increased enlightenment of the whole people, this matter must be approached most effectively through the children. When we consider the three factors which are of primary weight in this warfare, this will be manifest.

We must first have such habitation conditions as will not make the infection of the children an inevitable result. Conditions must be found whereby children can have a certain protection from intra-family transmission. This involves not only better habitations, but a different conception of domestic management, and this can be achieved only by a strong pressure in behalf of the children.

Second comes the spread of intelligence. It is very well recognized that in sociologic effort extending in its scope and prospect over a long period of time, the point of advantage and attack is the child, and so it is that, in looking forward a generation for substantial results, we are quite justified in pinning our faith as to promise of those results upon the education of the child now coming up. Not only is the

promise of mature intelligence through education of the child justified, but right along even during childhood years these little citizens exercise an immeasurable influence upon family life.

But above and beyond this is the third consideration. No problem is greater before the world to-day than that of instilling the essence of hygienic living. Assuming, if we may, for the moment, all our desiderata and all of the necessary physical conditions and possibilities as achieved, until the genius of the people has been reclaimed from the habitation type and restored to the out-of-door and air-loving type, this question will not be solved. While recognizing certain apparently contradictory facts, such as the extreme susceptibility of savage tribes to tuberculosis and the relative insusceptibility of habitation tribes of our city dwellers, due to what seems to be an acquired immunity, one is nevertheless justified in declaring that habitation life is essentially an artificial condition which must be met by appropriate corrections.

The notion of immunity incident to prolonged and intense exposure to infections, may have a scientific interest, but even if it be sound, as a means of ridding the world of tuberculosis and of making life safe and agreeable, it is not to be considered. The love of the out-of-door life, irrespective of its elevating and emancipating effects from a mental or moral standpoint, is perhaps the greatest safeguard of the people. In no way can such life, taste, and habit be inculcated without affording opportunity, and we come immediately face to face with what is thought to be simply a civic problem, namely the establishment of out-of-door space, accessible to the public and offering such facilities and attractions as will lead the youth of the community to incorporate into its daily life a measure of its experiences.

The enlargement of the plans of outing, of out-of-door schools, of playgrounds, of supervised gymnasiums and all of the activities which can be brought to bear upon the

development of the young, are of fundamental importance in this broad conception.

When we stop to consider that tuberculosis is only to be cured in its incipency, that whenever it is established and progressive it is not only to the individual a certain destruction, but to the contingent community a menace, and when we consider, in addition, the probability that an enormous part of the infection takes place in childhood, it leads us inevitably to the conviction that, from a public and sanitary viewpoint, efforts should be concentrated upon prevention.

The few suggestions foregoing, it seems to me, unerringly point to the conclusion that the successful war upon tuberculosis is a community matter rather than a medical matter, and that, however great our duty may be, as enlightened and expert molders of public opinion, we must unfetter ourselves from our special and scientific restrictions. We must enlarge our view and distribute our energies, in so far as we hope to be effective, into lines of sociologic research and effort, and endeavor not only to become wise critics of method, but earnest coöperators in the work of social evolution.

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PLAYGROUNDS IN THE PREVENTION OF TUBERCULOSIS

IN attempting to estimate the value of the achievements which now and hereafter are to be accredited to the Playground Association of America in their bearing upon the great problem of health, and more specifically upon the distressing and imperative questions of tuberculosis, one is led to a simple subdivision of territory into parts quite separable in theory and infinitely interwoven in fact.

We are in the habit of speaking of the treatment or cure of tuberculosis on the one hand and the question of prevention of tuberculosis on the other. The logic of the situation would seem to suggest that as a social proposition it were worth while to concentrate effort upon the ways and means for prevention. As a practical proposition, however, the foundations of prevention are only to be considered secure when the question of treatment or management of individuals already diseased is adequately met.

The war against tuberculosis is being combatted by many forces approaching from various directions. Probably no group can carry a complete work and no intelligent effort should be considered superfluous. There are three general lines of effort.

Men of science are pursuing with intensity the ultimate facts as to the nature of the disease, and very significant and encouraging data are rapidly accumulating. Whatever is thus offered is being eagerly adapted for the practical purpose of relief and protection, and the scientific status of this matter must be considered thoroughly satisfactory.

It is to be remembered, however, that the exact statement of scientific dogma must vary as observations and

demonstrations multiply, and that not only must we anticipate great change in the scientific theory pertaining to this subject, but we must continually guard against traveling paths which are too closely contingent upon accuracy of a present theory, and on the other hand must aim to pursue lines which are obviously sound in the light of practical experience.

Fortunately our status as to treatment has not been determined by theoretical considerations to any such degree as to make it particularly sensitive to changes of dogma. It has rather been the outgrowth of experience and wise interpretation of accurate observation and clinical results. Our wonderful advances have been far less the result of scientific development than the reward of determination and devotion on the part of physicians whose humanity has led them to exhaustive and persistent effort. So signal has been the demonstration of great possibilities in this medical field, that the whole world has been agitated and has begun to participate in the work of establishing sanitary foundations upon which shall grow an immunity from this unspeakable scourge.

Recognition of the dire distress of those whose conditions of life surround them necessarily with danger, and of their pitiable inability to protect themselves by personal effort, has long existed and it has been supplemented by a distinct hope that something can be done to mitigate such conditions. Out of these two factors has grown a moral awakening amounting to an imperative impulse.

In bringing to an effective point this public movement, the second class of workers comes of necessity into evidence. Organization and propaganda are the functions to which this class must devote itself, and it is inspiring to note the tremendous development of organized relief machinery which has come into existence. Although as a rule these efforts arise with the medical profession, it must be borne in mind that they are only incidentally medical matters,

and that to regard them as such would be at the outset to minimize their achievements.

While the medical profession is outlining the technical facts upon which the campaign must be founded, there still remains a third problem, magnificent in its proportions, how to bring the masses of people in the world needing protection within the circle of intelligence and under the ministration of facilities adequate to their dire necessities.

How to make available for general application a technical fact which from its conditions demands material resources possessed by a tiny minority of the world, is a problem in sociology to which physicians can contribute nothing except from the standpoint of sociologic adventure.

We feel reasonably satisfied with our ability to cope with certain phases of tuberculosis when we are given facilities, but in the general and public aspect of the matter we have still before us to determine what is the minimum requirement which shall still be possible to prove efficient.

What seems so simple in modern management of tuberculosis, as a process for practical application to the masses is beyond measure complex.

We cannot, however, escape the necessity of establishing conditions of feasibility before our efforts can have any prospect of success. Two lines of effort must proceed together. On the one hand, all ingenuity will have to be exercised to mold, modify, and adapt living conditions with reference to these features of treatment, and on the other, therapeutic demands must be simplified to the utmost justifiable degree.

Tuberculosis in small communities of people, having comparatively few poor and being reasonably well separated, is not at all an intricate problem. It requires some money, determination, and systematic pursuit. When one, however, undertakes to estimate the problem presented by city conditions upon such a basis, it is immediately obvious that the problem is not simply one of multiplied numbers,

but that there are features distinctive of "group" conditions, which in the field of sociologic effort present more or less common perplexities. Not only is it difficult to protect the individual against the mass in these circumstances, but it is almost as difficult to separate the individual from his peculiar social propensities, without at the same time moving the mass along lines which it tenaciously resists. To say that the more submerged masses prefer squalor and discomfort would be beside the facts, but to recognize the tenacity with which they cling to the same, as a feature of "group" existence, is absolutely necessary before the combat therewith can have any promise.

The more fixed these city conditions are, the more absolute is the necessity to cope with them, because a breeding ground of disease will always be found in the centers of dense and more or less squalid residence. What to do in these discouraging and apparently hopeless conditions is the question before us. It is reasonably easy of statement:

First, so to provide for the individuals who are diseased beyond the chance of recovery that they shall be comfortable and no longer a menace to those about them.

Second, so to educate those whose disease is sufficiently incipient to have a prospect of recovery, that they may avail themselves of the facilities offered and at the same time offer to them those opportunities.

Third, so to restore the conditions of living that those not yet infected or in whom a latent infection has made no headway may maintain such a grade of physical health as to protect them against attacks from within and without.

With the difficulties of dealing with those already diseased we need not concern ourselves here. It is enough that we recognize them as greater than can be successfully overcome inside of generations.

With the third consideration, the preservation of health in those thus far uninfected, we have distinctly to deal in any broad conception of this playground problem.

I believe it is reasonably established that social vices, voluntary or circumstantial, which are deeply rooted, cannot be uprooted except through continuous and systematic effort covering a long period of years, and to the correction of which contributory factors of all kinds must be brought into operation. Practically in almost all such questions the hope of the future lies in the children, and the weight of the elements which must be considered and brought into harmonious constructive operation is enormous.

It is not at all sufficient that the children be protected during their helpless years from danger; they must be furnished with sturdy disease-resisting bodies. The problem of tuberculosis involves a deep conviction as to the principles of living which, even though it can be inculcated in their youth, will be as rapidly eradicated by their contact with their elders, unintelligent and fixed in habit, unless their knowledge and impulse can be kept alive by special advantages and inspirations.

Side by side with the development of intelligence in the child must come the magnifying of child importance in the domestic organization. The two factors, child education, growing into mature habit and belief, and child importance, influencing family method and proportion, if they could be achieved would distinctly advance the freedom of the world from the tuberculosis pall.

If we accept the proposition that through the child must come the great advances in the social conditions of the race, it becomes necessary to determine with some degree of certainty the lines upon which child influence is operative and what variations in its influence may fairly be sought.

It is scarcely conceivable that mere academic instruction, even supposing that it could amount to real intelligence in the child, could be of much weight in combatting the overwhelming influence of pernicious environment. It is not likely that the full training of a child in the practical ways of hygienic life as an individual, would have markedly great

influence. I think it is fair to assume that neither of these ends could be accomplished by itself, and hence we are forced to face the matter as related in some way to mass influence, which may fairly be expected to react upon the general child life of the community.

When we reflect upon the economic restrictions surrounding the industrial classes, we must recognize beyond a question the difficulty of magnifying child importance in the family, at least as a conscious process on the part of the family. Instinctive parental solicitude very rapidly wanes under the hard conditions of existence, and unless this can be fortified by far reaching and powerful counter agents, the child will continue to be subordinate to almost any degree.

I think it would be agreed, however, that given any reasonable opportunity, the natural instinct of the family is to cherish the child and provide for its enlargement of life opportunities. To assume indifference fundamental and unchangeable on the part of even the low and ignorant, with reference to the prospects of offspring, is to reckon without the most potent force in human experience.

How then is this primary impulse to be unfettered, to the end that child importance in "group" life becomes a dominating idea? By what means is it possible to cultivate this conception of relative importance? How can the various factors concerned be so coördinated that they shall move harmoniously, even though slowly, toward a distinctly better position?

To answer these questions adequately would be to solve the problem of social regeneration in any and perhaps in every direction. The difficulty of making things move together has been and will continue to be the incubus upon all reform effort. Not to recognize this necessity, however, would be to ignore the perfectly obvious, and beyond a question the forces working toward social correction must move with some concentration upon this point. Organized coöperation between educators on the one hand, combatters

of child labor on the other, molders of child morality on this side, protectors of child vitality on that, is the fundamental and indispensable desideratum in the struggle.

The importance and significance of the habits of life, illustrated in the field of tuberculosis, is enormous. The extent to which this penetrates into the living conditions of the entire industrial mass is overwhelming.

One glance at the principles of treatment of incipient tuberculosis opens a volume of reflection. We treat tuberculosis by superabundance of fresh air, food, and rest. That we have not reached exact technical definition as to the amount of each that is absolutely necessary goes without saying, but that the adequate supply of each is fundamental to the cure of tubercular disease is beyond question.

Need one stop to point out the fact that the principle which underlies the treatment or cure of disease must be of tenfold importance as a principle underlying proper and protective hygiene? Do we concentrate our attention upon abundance of fresh air? Instantly we are confronted by the problems of habitation, sanitation, and legal regulation of living conditions.

Do we turn to adequate food? Inevitably we include in our speculations not only possible source of supply, but intelligent utilization, domestic economy, and pride of management. Is it a question of food and labor? At once there opens before us the whole territory of industrial conditions, demands, restrictions, and possibilities.

It is probably true, however, that, from the standpoint of the practical tubercular sociologist, these factors are not equally important. In this country, for example, inadequate food is not an extreme condition. In the very young and average healthy child, sufficient rest is not so difficult of achievement.

Of the three elements in question, air is the important, predominating condition. "You can lead a horse to water but you can't make him drink." Has it ever occurred to

you that the great lack in the world is not lack of opportunity but lack of disposition to make use of it? Have you practiced medicine in the country and had to discover and labor with the fact that no one is so much house surrounded as a country girl; that no one is so utterly unwilling to take normal physical exercise in the open air; that no one is so likely to utterly scorn, as food, milk, cream, and eggs?

I cite this as a signal example of the failure of opportunity to carry the uninstructed along lines of hygienic living. It is unnecessary at this point to question why, but it is necessary to reiterate emphatically that simply furnishing facilities for wholesome living is not a guarantee of a wise or even ordinarily healthful employment of them.

From the standpoint of tuberculosis under our present light, one thing must be accepted as fundamental. To as great an extent as possible the out-of-door type of life must be substituted for the habitation type. It is unnecessary to argue all the difficulties involved in this, or to hesitate in the face of the industrial restrictions which stand in the way of its ideal accomplishment. It is not necessary that the reform in type of life be absolute, but it is necessary that it be so pronounced that the conditions of hygienic living shall be established to a degree sufficient to offset the present encroachment of vicious in-door existence.

I waive at this point all discussion of the fact that years and generations of life in densely peopled and unsanitary conditions seem to have produced an immunity against tuberculosis. Equally I waive the discussion of the interesting fact that the savage races are enormously oversusceptible to tuberculosis. Those are deep physiologic and ethnologic problems which are more or less beside the question.

As a practical movement in our present-day struggle, the fact is not to be gainsaid that proper fresh air experience as a daily factor in life is the most important single element in this whole question. To accomplish anything

in this direction involves a great deal more educative effort than is generally realized. The public is liable to feel that it has done its duty when it has established a wise tenement law, when it has furnished an abundance of parks, when it has dotted the community with playgrounds. As a matter of fact, when all that has been done, the surface of this ground has only been scratched.

The problem is, and will continue to be, how to implant in the human race, living under modern social conditions and particularly under industrial restrictions, such a hunger for air as will force it to take advantage of facilities which may exist. Again and again I shall reiterate this principle, for until it is recognized, until effort shall be expended in that direction, our most elaborate contributions in the direction in which we are to-day engaged will be of small value.

The child who prefers to sit huddled up in the corner reading a book, is an abnormal product of civilization and has as distinct a vice to overcome as has any child with any degree of moral obliquity. The family whose physical discomforts lead it to crave the immediate comfort of warm air, no matter how polluted, and whose economic necessities make it necessary to exclude the external air, is inexpressibly more the proper object of state intervention than if it were being poisoned by food, or drug, or alcohol.

No one with experience will deny that these conditions in one walk of life or another exist. We are altogether too likely to conclude that they need to exist.

Experience shows that it is not difficult to teach a tubercular patient to sleep comfortably and even eagerly in the open air under conditions most rigorous. Such education, however, is in the form of special pressure growing out of a recognition of great danger and a consequent willingness to coöperate in its avoidance.

Experience will show that to educate a whole family, who are not under the pressure of threatening death, to

sleep under these life-giving conditions, is fraught with the utmost difficulty, yet it is safe to say that, with comparatively minor change in the habits of living, an enormous gain upon the tuberculosis plague could be made by that simple device.

Protection of the child must be the watchword under which this reform will be achieved. The ideal of a healthy body, the obligation to protect the child in its susceptible years, the willingness to sacrifice for the child in material ways, have to come as the foundation for general reorganization.

The scope of the playground movement broadens enormously at this point. To provide generously the open spaces necessary to carry on the work is obviously the first duty. To regard this work when done as an end accomplished, is scrupulously to be avoided. To learn to regard the playground as an elementary means to a very great end, must be the object of our propaganda.

The question of playgrounds as a mere matter of acquiring territory is really very simple. The utility of the playgrounds in their broad relations will stand or fall upon the method of their administration. To those well versed in the subject this observation is unnecessary and perhaps trite. To the mass of people who are really anxious that there should be playgrounds it will be a more or less new conception. Nothing is more barren than a playground which is not administered either by competent management or by the versatile initiative of experienced players. Nothing is more inspiring than the responsive participation of children in purposeful play. But beyond these features which touch so deeply the love of children that pervades the human race, there rests upon the playground organization a deep and imperative duty:—to make the playground one of the factors in the reorganization of social method which shall offset the deteriorating viciousness of modern habitation life.

The primary question, of course, is: Are playgrounds susceptible of such administration? I think there can be no contradiction of such an assumption. To that end, however, two great principles must be invariably followed.

The playground must be made attractive to the child and wholesome, and so unrestricted as to give to every child a proprietary interest. On the other hand, by every conceivable means, the elders must be brought into realization of the privilege and beneficence of the playground, and into an actual coöperation in magnifying the interests of children as a principle of their up-rearing. To bring the unenlightened or even the so-called enlightened parent to value the playground as he values the schoolroom is a colossal undertaking, but unless this can be accomplished the work will fall far short of its legitimate possibilities.

Is it not obvious that what you do with your playgrounds after you get them is after all the big problem in its sociologic or civic relationship? Will it not require enlightenment, originality, and sympathy on the part of the governing body? Is it not in danger of being cramped, stifled, and dwarfed by the application of that popular, fallacious, and devitalizing notion of "business administration"?

Until we can be assured that business management shall be employed merely as a matter of method, and that the principle and spirit underlying playground administration shall be intelligent rather than commercial, we shall never be safe in handing over to the organization bodies the management of this great community interest.

The conclusion which I wish to draw is plain enough: the organization which has sufficient interest to undertake to procure for the industrial masses this vast educational endowment, must maintain for its successful issue a strong, watchful, and imperative supervision which shall guarantee for the future a generous reward for the strenuous and heroic struggles of to-day.

Date and occasion of writing unknown.

SCHOOL PLAYGROUNDS

THE question of the relationship of physical well-being to the body politic is becoming, as you are aware, a very burning one. Fragmentary legislation, sporadic cases of control, efforts to bring the regulation of health conditions under the general influence of legislative enactment, are very familiar to you. It is true, however, that these efforts thus far are unsystematic and continually under the jeopardy of judicial discredit. I think, however, it is safe to say that it has come to pass that the State has awakened to its own consciousness of its obligation, not to any class of its citizens, but to itself, and upon that hypothesis the State has undertaken to establish its right to dictate what shall be the conditions of health under the general broad provisions of police power. I think it is safe to say that the judicial view of legislative efforts, in the direction of controlling conditions of living, tends fully to support the contention that the State has a right, with reference to preservation of its own integrity and welfare, to take the broadest cognizance of health conditions under this general idea of police power.

That is very good so far as dealing with our fixed or current conditions is concerned, but I want to call your attention to the fact that the broadest exercise of police power, by the State, after all deals with the problem in masses, and consequently can only deal with phases of the problem and influences bearing upon the problem which are simply operative under mass conditions. Not merely that, but hitherto the State, in dealing with those conditions, for the most part has contemplated and dealt with terminal conditions, — conditions in which damages to the developed people, as distinguished from the children, have already been

brought about, and the consequent good which can be accomplished by State control of all classes of individuals is comparatively limited. If we are to have general perfection in our people we must have perfection which is based upon individual quality, individual development. How this is to be accomplished is the greatest problem in health matters to-day. The personal conditions of individuals are largely matters of habit. The most personal habits of individuals with respect to physical matters are results, partly of education and partly of imitation. Not only that, but the question of habit is perhaps the most difficult question from a therapeutic standpoint that we have to deal with. There is hardly anything so difficult to establish in our medical relation to the people as change of habit, even if beneficent, obvious, and perhaps of the slightest degree. So it is that we have to meet and control, in this whole question of establishing individual perfection, that great inertia represented by the double term of imitation and habit.

The child habit, fortunately, though it is as tenacious in principle, is far less fixed in fact, and it is well recognized by all educated sociologists and by all physicians that the place to accomplish radical, fundamental, and progressive changes, mental or moral, is in childhood. If it is true that childhood offers opportunity to influence individual development of all kinds, we must come to the conclusion that the place where it is most worth while for us to put in our time and effort in the direction of physical superiority is upon the child.

And then the question arises, How shall we do it? I may be mistaken in my opinion about this, but my opinion is very fixed: No great progressive movement amongst children or adults, and particularly amongst children, ever came as a matter of compulsion—I mean primarily and finally compulsion. Whatever compulsory factors may enter into it in various particulars, compulsion does not

afford a reasonable pathway to physical perfection of the individual.

What, then, is there left for us to consider? So far as I can see—and this goes right along from babyhood up to and through adolescence—the only way we are ever going to establish a broad conception of physical well-being and physical perfection, a *conscious* desire on the part of individuals for physical perfection, is by the establishment of some kind of ideal to which the individual shall adhere, and with which his conduct in life shall in some degree or other square. It is just upon that point I start my argument of choice for a playground. How are we going to create an ideal on which the child shall build, in this question of physical perfection?

First, let me ask, what do we understand by playground? Do we mean simply an open space in which the children are to romp? Of course, better than nothing. Any form of play which provokes boisterousness, or anything incident to it, is far better than inactivity and confinement for children. But that is not the best play. What we mean by playground in the modern sense is an open space, equipped with various paraphernalia, designed to be, at the same time, attractive to children and developmental under the use of the children.

We are not talking about conditions of play for children in the country, but under urban conditions where there are no open spaces, no resources, nothing except what the State offers to the child in connection with public parks or the public schools. Under those conditions and in that line what we mean by a playground is a sort of outdoor gymnasium.

How are we going to utilize such an outdoor gymnasium for the purpose of creating an ideal to which the child's developmental tendencies shall be brought into harmony? That is a matter of intelligence and ingenuity on the part of the instructors who are related to this work, and if you

think that it is a negligible matter you are vastly mistaken.

What can be accomplished in stimulating children to useful, purposeful, developmental work in connection with the playground, is something far more than I can describe briefly. It is of the utmost importance, however, to recognize that children have their mutual ideas, and any student of psychology will say that the process which aims to develop children has got to follow the course of child psychology. Consequently it requires a great deal of study to know what to do with a playground, with reference to the aggregate mass of children. Children, of course, are imitative, and, to a large extent, the good or bad in a mass of children will prevail according to various conditions, depending on their imitative tendencies,—but more than that, children are emulative. Children will tend to *want* to excel, provided the basis of excellence that can be established in connection with playgrounds is an obvious basis.

Let me illustrate my point lest I may seem obscure. Dr. Gulick of New York is the great master of the playground, and in developing one scheme after another in the evolution of the work, he has discovered that one of the most potent influences he can bring to bear, is a certain pride that children can be made to have in definite performance, the evidence of which is shown in wearing a certain kind of button in the button-hole. For instance, "chinning up" on a horizontal bar so many times is accomplished by a given class of children, and this is rewarded by a definite sign button,—and so it goes on from phase to phase in the development of different exercises, the insignia being changed as the development goes on, to the extent of absolutely bringing the whole body of children into an emulative frame of mind. Bear in mind, there is a great difference between the emulative and contesting frame of mind.

Not only are these influences strong in their tendency toward physical development and superiority, but physical

superiority is to a very large extent exclusive of mental and moral delinquency. That is one of the great principles which I think is established. The tendency of good health and good physique is to exclude degenerate and deteriorating influence in life, and so, as a moral effect, as a prophylactic, as a character-breeding or citizen-breeding influence, I have no hesitation in saying that the playground could be made greater than the school curriculum, and I have considerable hope that it will be a dominant factor before the school curriculum shall have been satisfactorily adjusted.

Of all our problems the problem of great importance in the way of dependency, disease, inefficiency, whatever you choose to call it, harks back in the last analysis to physical vigor. Laboring men have come to realize—sociologists have come to realize—that the great industrial problem to-day is health, not wages or shop rules or unions, but health. That being the case, could there possibly be any greater argument for the development and universal recognition of the dignity of the playground in the school curriculum? If conditions of physical perfection, conditions of physiologic good habits, of normal and sound hygienic methods of living, tend to exclude in the child vicious habits of growth, mental or moral, how much more is it true as applied to adolescent and adult considerations?

There is no influence, I feel convinced, that can be more successfully brought to bear upon the body politic in the direction of sanity and morality and general integrity, than the influence which can be developed out of a judicious and intelligent utilization of the school playground principle.

Delivered, June 17, 1908.

Printed, *Chicago Medical Recorder*, June 20, 1908.

PRESIDENT'S ADDRESS TO THE CHICAGO MEDICAL SOCIETY

IN presenting a brief review of this year's history of the Chicago Medical Society, I wish to express most earnestly my gratification at the honor which was conferred upon me in electing me to this office, and my grateful appreciation of the marked courtesy and coöperation afforded me in all directions in my efforts to serve the Society.

In addition to the sense of privilege which I have felt in being able to exert some effort for the Society, I have experienced an added pleasure in broadening my acquaintance with the members of the Society and the individual branches which compose it. No one can undergo this experience without being conscious of having grown distinctly in knowledge of the profound importance and deep appreciation of its labors.

It is to be regretted that the great size of the Society prevents such wide knowledge on the part of every individual. I emphasized the fact that personal intercourse throughout the membership of the Society is not only desirable but should be fostered as a distinct policy of the organization, developed on the broadest lines which seem to offer real results.

The work of the Society during the past year has been uneventful, generally speaking, but when viewed critically in respect to the scientific merit of the work both in the Branches and the Central meetings, it is beyond question that the grade of production has been better than ever before.

The average attendance in the Branches has corresponded to this growth in scientific work. The development of the Branches is not yet all that it should be. The

reflex upon the professional status of the Branch activities is bound to be progressively greater, and yet it must be borne in mind that the fullest development in the way of stimulus to professional excellence involves a conscious and real relationship to the main society and through that to the organized medical fraternity of the country.

The meetings of the Central Society this year have been extremely gratifying. There have been many programs of a very high degree of excellence and the attendance has not only averaged larger, but has obviously been tending to increase steadily. Part of this is due to having the meetings in a far more suitable place, but in the end, the excellence of the program will be the determining fact.

It seems to me desirable under the conditions in which we work that the hour of meeting should be at half-past eight instead of eight o'clock. It is very desirable that the men from the outskirts should be able to participate. Most of them have work in the evening. The distances are very great, and as a practical point, in my judgment after careful observation, I believe the hour of eight-thirty will give better results. This will permit meetings to be called promptly on time, which this year I have not seen fit to do.

The meetings with the affiliated societies have been thoroughly profitable. It is noticeable that more people are doing scientific work of a grade which deserves distinguished notice. Keeping pace with the strong advance in educational circles, particularly in the line of research, the rank and file of the profession is finding it worth its while to participate in laborious study and present its results. Naturally the special societies will push on strongly in this matter and there ought to be a great volume of valuable work presented in the future.

This year has seen instituted, and demonstrated as practicable, the Business Bureau. Thanks to the persistent and confident effort of the Committee on Business Bureau, what used to seem to many of us an impractical scheme

has been brought to a successful working basis. So far as one can judge, the future of that enterprise is assured, and if so its value to the profession, as an element of strength, harmony, and prosperity, is beyond estimate.

It seems to me very important that the functions of the Business Bureau should not be increased until it has thoroughly mastered its present activities. There is no doubt that the future will open many possibilities, but I can not too strongly urge the perfecting of present plans before branching out.

The activities of the Council have been important during the year. Whereas some of the Committee have completed their labors for the time being, and are at the moment inactive, others have taken up work strongly and constructively which should be continued without relaxation. The basis of all achievement in professional as well as social development, is *continuity*, and nothing is so wasteful as even temporary relaxation.

The Committees dealing with hospital abuse, dispensary abuse, contract practice, and relations to medical education, should be continued and their work earnestly supported.

The medical profession has never had the weight in public affairs to which it is entitled. The general unitedness of the profession, however, gives promise that in the future its influence will be recognized. With reference to that end our strong organization is, of course, fundamental. In order, however, to become effective, the subjects with which it ought to deal, and upon which its forces should concentrate, must be focused by some stable machinery, and to this end I believe and recommend that the Committee on Public Relations should be continued strong, and should be encouraged by enthusiastic coöperation to take up public questions, outline their scope, and organize the professional sentiment and effort toward their solution. I strongly urge the necessity of a body which shall initiate action in order to secure full benefit of our organic power.

A distinct advance with respect to the organization of the Council has been made in the Constitutional Amendment looking to an equitable reapportionment of representation from the Branches. So far, it appears, this subject has been satisfactorily adjusted. There are many flaws and discrepancies in the constitution and by-laws. It is very imperative that these be taken up systematically, and the whole matter harmonized and put into definite form.

The Committee appointed by the Council to take up this question was appointed too late for effective work this year. That Committee dies with the expiration of this year and should be reappointed with instructions to do as much work as is practicable during the summer.

The last few weeks have seen the development of a very stirring political campaign with reference to the offices of this Society. Generally speaking, I can conceive of no more healthy fact than universal interest in our election. It is probably inevitable, and there is no objection to strong factional activity with reference to elections. There are two considerations, however, which the members of the Chicago Medical Society must honestly and disinterestedly weigh in connection with such political activity:

1. The issues must be issues of principle and policy and not issues of selfishness.
2. In the pursuit of political supremacy in the Society based upon issues of principle and policy, personal interests and private antagonisms must be eliminated.

Recognizing the tendency in human affairs to acrimony in the heat of strife, I yet enunciate as a fact, demonstrated times without number, that in the long run selfishness and personal interest will be recognized by the rank and file and effectually and permanently discredited.

The work of the Chicago Medical Society has only just begun. Its influence as a force in this community is not one tithe of its due. Its power for achievement must not

be permitted to be dissipated by the development of dissension growing out of a struggle for office. The man who sacrifices the real interests of the Society to his personal ends is a traitor, and the Society must be kept awake to its true dignity and be so intelligent that no abnormal or illegitimate exploitation can long prevail.

At this writing I have no idea as to the outcome of this election. Whatever that outcome may be, I urge upon the Society the instant burying of animosity and the full determination in the interests of the Society and in the interests of that public usefulness which is in our charge, that we steadily and honestly pull together.

It is my deliberate judgment that in the interests of the Society there should be some definite way by which the retiring president should be continued automatically for a time in intimate relation to the conduct of the affairs of the Society. No matter how diligent his study, or how untiring his effort, no president can do more in one year than acquire a full understanding of the issues involved as between the profession and the public and the possibilities of action on the part of the Society. By the time his mental operation is mature his term as president terminates, and unless he happens to get a seat in the Council by election, his greatest usefulness to the Society is over.

I recommend, therefore, in the readjustment of the Constitution, that a provision be made for the continuance of the retiring president for a reasonable length of time in the Council of the Society.

That this recommendation is in the interests of the Society and not at all in the interests of the individual must be perfectly obvious. In fact, at the end of an industrial term, as a rule, the president would prefer to be relieved from duties, but the Society can not afford to dispense with the intelligence of men whom it has seen fit to elect to office and whose opportunities for comprehensive judgment are thereby greatly enhanced.

The fact that this recommendation is purely for the Society's benefit and absolutely unrelated to the individual's benefit, is my justification for making a recommendation in its nature somewhat delicate.

In closing I wish to reiterate my conviction that the Chicago Medical Society has not crossed the threshold of its usefulness or greatness, and that all that is necessary to the consummation of its highest promise is clear judgment and unselfish devotion.

Delivered, International Tuberculosis Congress, Washington, D. C., September 29, 1908.

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LEGITIMATE EXERCISE OF POLICE POWER FOR THE PROTECTION OF HEALTH

THE *difficulty of police regulation*.—There is a difficulty which must not be overlooked or underestimated in an effort to exercise legal mandates and restraints as between employers and the employed. This difficulty is the antagonism which has developed out of superficial and apparent conflict of interest, an antagonism which permeates the entire social fabric. While social philosophy could demonstrate the identity of interest in almost every instance, it is unreasonable to expect that the ideal conception of the social philosopher will prevail upon both sides of this controversy as an initial step. Experience teaches that contention and compromise are the steps by which progress is made. While it is not beyond hope that an understanding and fair agreement will ultimately reduce differences to the minimum, there are many objections to the exercise of unlimited patience during the working out of the problem of industrial sanitation. To any extent that portions of the subjects in question can be made to appear more important and more obvious than others, an attempt should be made to deal with them as individual factors, separating them if possible from the general mass of industrial questions, and particularly striving to escape the hindrance from both sides which naturally attaches to industrial disputes.

True basis of police regulation.—If it can be made to appear that society as a whole demands for its own preservation the carrying out of a definite policy, its mandate upon both capital and labor can be supreme, residing far above the level of factional or class controversy. It is upon this

ground that the interpretation of "Police Power" must operate.

In the industrial world, health is the foundation of productiveness and the bulwark of economy. That society and progress depend utterly upon these factors can hardly be questioned. It is hence only necessary to reach a conclusion as to the fundamental importance of health as related to the product of any individual, or to have a comprehensive grasp of the elements of waste and dissipation in social affairs, to at once put the question of public health as a thing apart to be dealt with as a social problem irrespective of its particular bearing upon any class of citizens. From this point of view, what Labor demands will be quite as irrelevant as what Capital refuses. The question will be more simple and more difficult.

What is the sound position to take with regard to public health necessities? What is the wise course to pursue in the development of operating plans?

Police power as an aid to research. — It must be apparent that the question of sound doctrine as to sanitary facts is not only preliminary but fundamental to any broad and radical exercise of police power. It is, however, obvious that, pending the development of substantial knowledge, extensive regulation must proceed, more or less temporary in its character, and it is also manifest to those who are studying the problem, that large police coöperation is essential in the establishment of the facts underlying public disability. It is important, therefore, to recognize that the immediate structure will be temporary, and that much of the police power that it is necessary to invoke will be for purposes of research rather than finally satisfactory for purposes of sanitation.

Our courts and the police power. — In common with other statutory functions in its jurisprudence, police power in the United States, has aspects which are not prominent in the legal administration of European government. In the

United States, legislative enactment is not paramount but is subject to construction and destruction through judicial review. This is a feature of national policy, fundamental and, so far as we know, permanent. There is no doubt that it exerts a distinct retardation upon what might be regarded as progressive legislation. It is not likely, however, that legislation, which is directed primarily to the preservation of health, is going to be seriously hampered by our constitutional limitations upon arbitrary legislation.

The trend of judicial statement is on the whole clear. The broad interests of society upon the side of health, if they can be defined, seem to be of paramount importance in judicial opinion. It is well to observe, however, that the courts will not sustain legislation for the correction of even admitted abuse which can be interpreted as distinctly class legislation. For example, the bakers of New York failed upon this ground to secure the relief obviously important. On the other hand, the interests of the body politic represented in the physical well-being of women, was recognized as imperative in the decision affecting the recent Oregon cases. For our purpose, as advocates of legislative assistance in sanitary reform, this distinction is of the utmost importance.

The need of accurate knowledge.—The interest that the State can show in sanitation will carry greater weight than any degree of interest of immediate beneficiaries. It is noteworthy, moreover, that the courts are susceptible to demonstration as to the essential facts. *Ex cathedra* statement receives and deserves scant consideration. Pains-taking accumulation of relevant data carries the utmost weight. The hand-maiden of public interest, therefore, is breadth and accuracy of statement. With these grounds properly covered, the prospect is that legislation can proceed fully as rapidly as the necessary basis in fact can be established.

The health of the people stands as a subject of admin-

istrative scrutiny without question. In view of that fact, and the further fact that police power in American law is so recent as to have no deeply rooted traditions, it seems probable that the future of this question will rest to a large extent upon those branches of the medical profession which are active in sanitary research. Coöperation between the physicians and sociologists, with the development of a zone between them which shall have the characteristics of both, seems to be the method of attack.

At this point we may well ask, Upon the basis of our present knowledge, what are we justified in pointing out as public necessities?

The tuberculosis problem.—Tuberculosis presents on the whole the most complex and most important example of social evil. No other disease has the same economic importance; no other is so interwoven with industrial conditions; no other has such relation to habitation. The fact that measures of correction in one direction do not reach a full result, while evils continue uncorrected in other directions, is not ground for hesitation in urging legislation. Experience shows that reform breeds reform, and that a wise standard is effective in its influence upon correlated matters.

The difficulty of habitation reform.—It is but necessary to realize how complex the habitation question is, to recognize the difficulty of starting from that side. Ideal habitation associated with bad habits would have slight results. The task of re-education of the masses in their hygiene is colossal and will take more systematic effort and far greater time than all the other phases of tuberculosis warfare.

Industrial life the true point of attack.—While it is perfectly obvious that, so long as there is lack of good habitation conditions and reasonable hygiene, the benefit of improvement in the conditions of industry will be to some extent neutralized, it is nevertheless true that industrial life is the point of advantage from which to undertake

reorganization. Not only is it possible to establish physical conditions in which the workers will be comparatively safe, but it is inevitable that the reflex upon their personal views, tastes, and habits will profoundly affect their habitation vices.

The argument that has been and will continue to be urged against the regulation of working conditions, that such legislation is futile in view of the home conditions, appears to me to have no considerable weight. I believe that close scrutiny and regulation of working conditions anywhere and to any extent, that can be made to square with a rational statement of economic necessity, is right to demand and reasonable to expect.

It is for this reason that educational propaganda should be universal. While it is true that the masses are the great sufferers from tuberculosis, and need the utmost industry for their education, it is also true that the forces which influence legislation at present arise in quarters where the consciousness of the need is far less personal and consequently slow to develop.

Employers must cooperate.—The task of securing legislation affecting working conditions in our present system of industry can hardly be accomplished without coöperation of employers. Whether or not in the end that could be done, wisdom requires that coöperation be assiduously sought.

The economic soundness of the warfare against tuberculosis ultimately will prevail, and the more teachers of economics concentrate upon this demonstration, and the more powerful commercial forces are enlisted in this effort, the speedier will be the result.

Voluntary effort inadequate.—It is not likely that merely voluntary, or even coöperative, regulation is the best solution. Rules applied to an industrial establishment, which are not purely related to the immediate product of industry, are difficult of enforcement and liable to contro-

versy. There is no prospect of such general development of intelligence and coöperative spirit amongst employers as will ensure sufficient uniformity of process. There is no way to insure the acceptance, on the part of laborers, of conditions which may be to them distasteful, except through authority backed up by universal custom. There is no reasonable doubt that it is in the interest of employers, not only from an economic standpoint, but in respect to the practicability of instituting reform, that these measures be mandatory and the expression of a very radical State policy.

Endeavor to prevent contagion inadequate.—The ordinary regulation of an establishment from the standpoint of contagion is comparatively easy to effect. Once the facts can be established, and a practicable method of meeting the requirements determined, it is quite within the powers of existing authorities to carry into effective operation the necessary measures.

Although this will meet a demand made by the characteristics of tuberculosis as an infectious disease, it will after all encompass a very small part of the good that can be done in the workshop. Infection resulting from contagion is a very late step in the tuberculosis cycle. There will probably always be enough tubercular matter in existence to infect all the people who can be found susceptible to it.

Vigor more than protection.—Though not at all underrating the importance of diminishing the opportunities for contagion, while the vast majority of people are still in a state unduly susceptible to the infection, it must be recognized that the foundation of immunity is not protection but *vigor*.

The idea is far too prevalent that the fresh air element in the tuberculosis question is related to the purifying value solely. Granting that at any value you may, it is still true that *the* value of fresh air is as a physiologic stimulus to

the individual, and that it is inexpressibly more potent for that reason than for all others. This does not gainsay the enormous danger of concentrated polluted air, but again and again it is necessary to emphasize the physiologic aspect of immunity as against the fortuitous escape from contact.

Air hunger must be developed.—With this in mind, one reaches a conclusion as to what must be done for the race. Conditions of social existence, perhaps fairly to be called civilized, have a strong bearing toward enfeeblement. With possibilities for comfort come self-indulgence, to the extent of modifying normal tastes and stifling activities upon which bodily vigor depends. This is true upon all levels of society. The reawakening of air hunger, the establishment of standards of air distribution, and the creation of a morale with reference to air privilege, are radical and imperative necessities before substantial progress can be made.

The workshop as a point of departure.—At no point in the experience of any worker can these things be more advantageously achieved than in his workshop. For him who has no initiative and scant opportunity, it is the duty of the State to declare that conditions reasonably calculated to secure these benefits shall be the standard conditions of labor. Upon that basis as a primary demand, the State can and should exercise its police power and establish standards of air exposure sufficient to accomplish these results.

Opposition of employers and employees.—It is by no means a simple proposition. The most superficial consideration of what it involves shows a prospect of opposition on the part of both employers and employees. From the standpoint of expense, the aggregate demand would be heavy, but opposition on this score will subside when once the enormous increase in labor efficiency is demonstrated. The difficulty of determining the proper type of air exposure for different industries would be very great. The world-wide prejudice against low temperatures and free circulation of

air is deeply rooted. One can hardly conceive an innovation fraught with more difficulties to accomplish. It is, however, fundamental, and by no possibility, so far as we now see, can great results be otherwise achieved. If the proposition is sound, it may well answer the first question which I have propounded as to what position to take in this matter.

Need of fundamental action.—We are not here to look for superficial or temporizing measures. If there is a radical standpoint with respect to which we can confidently speak, we must occupy it. Not only are all other sanitary adjustments more or less ancillary, but this in itself constitutes a basis for agitation large enough to occupy the entire attention of sanitary and sociologic effort in the direction of protection of the health of laborers.

The second question is, What is the wise course to pursue in the development of operating plans?

We must study the relation of health to labor.—It needs no argument to maintain, that abundant data and well considered demonstration will be necessary to bring to pass this great reform. It is not the purpose of this discussion to go into the detail of the research leading to this end. It is agreed that labor legislation must have its foundation in clear economic advantage. It is perhaps not so well agreed, but the idea is rapidly growing, that of all the factors of an economic advantage, health is the most crucial. Upon this hypothesis, therefore, the conclusion may rest, that the logical primary step is the establishment of broad and effective study of health as related to laboring conditions.

While we must advocate and work for temporary and halfway measures of relief, in the interest of those now endangered by unsanitary conditions, we must hold in view constantly a deeper and more important purpose, the establishment of an entirely new conception of what are sanitary conditions.

The problem of offsetting the detrimental influence of

urban life.—To what extent aggregated masses can be made to accommodate themselves to artificial ways of life, is of course a question, but there is no reason to suppose that this can take place to any great extent, and we have absolutely no warrant in acting at all upon such an assumption. The world has got to reach a decision as to how to offset the detrimental influence of urban life. At no point in the entire discussion will there be opportunity for more valuable contribution to the solution of that question than at this: the fight for fresh air during working hours as a preventive of tuberculosis.

I believe firmly that the State may legitimately exercise its police authority over this question. I believe as firmly that it can never be accomplished otherwise, and I believe finally that there is no greater obligation resting upon sanitarians than to prove conclusively the necessity and point out clearly the way.

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THE FEDERAL CHILDREN'S BUREAU

IT would be a very false conception of the problem which we have met to discuss, if it were assumed that in purpose the forces which we try to overcome are directly antagonistic. I think it is safe to say, that with very rare exception there is not an employer of children in mine, factory, or sweatshop who would not prefer a different and better order of things.

Conditions of industrial life develop slowly and compactly, and it is as a final and at the moment inevitable phase that child labor bursts into its full enormity. So the employers of children find themselves confronted by a condition quite irrespective of individual preference; a condition so related on the one hand to industrial competition and cost of production, and on the other to labor competition and the struggle for existence, that they move on with a fatalistic insensitiveness that puts them in the minds of many into a class of malefactors to whom are too readily ascribed the responsibility for the outrages which they more or less perpetrate. That they are terribly culpable is true in spite of extenuating circumstances, but that they are voluntarily initiating the system which we deplore is not at all true. What they do, they do because they rest upon that ancient fallacy that business necessity is paramount to other social considerations.

They are not alone in this misconception. Thousands of right-minded, fairly intelligent men and women participate in the expression which has hardly the dignity of an opinion, that radical disturbance of the social order is bad. I speak slightlying as to so-called opinions on these matters

because it is eternally true that no opinion is worthy the name which has not as its foundation a reasonable understanding of the facts, and I assert without hesitation that the majority of those highly respectable conservatives, who are satisfied to let things work out their own solution, are profoundly ignorant of the conditions which they condone. To the masses of citizens who are indisposed to move in these measures of reform are to be added still other masses, who, because of their notions of political economy, object to legislative regulation or to administrative control through governmental bureaus.

Without approaching the abstract argument upon this subject, those who have made this matter a deep and conscientious study, reach conclusions applying to the concrete facts, with great definiteness. Absolute control of the health of the individual can never be the function of the State. Control of the conditions under which the lives of the people shall be lived and their energies expended, is an inevitable necessity. The State will approach this problem from the standpoint of self-preservation. Defective health is the foundation of crime, pauperism, and degeneracy, as well as that widespread inefficiency due to obvious disease.

All sociologic forces have come to recognize this fact. The physical well-being of the people is the deepest interest of the State. If the State is to undertake the establishment of conditions designed to safeguard health, it is imperative that the foundation of accurate knowledge, upon which to base radical and comprehensive legislation, be laid. The detail of such legislation is too remote to engage our attention here. What we must strive for is knowledge, and to this end, the interested forces demand a National Bureau of Health, the most valuable function of which shall be the culture of intelligence upon these subjects.

If this proposal shall become effective, it will appear to many that the end which we seek has been accomplished.

That will not be true unless the interests which we represent be specifically defined. The medical profession has only within a few years come to realize that child health and adult health present distinctly different problems. Our literature upon the physical aspects of childhood is very recent and meager. Our scientists who have devoted themselves to child welfare are comparatively few; yet one glance at the broad proposition should be convincing. Consider the difference in the questions involved as to how an individual goes out of the world and how that individual comes into the world. Is it not obvious that with reference to determining the type of an individual, and hence his value to society, the first few years are inexpressibly more important than all the rest? Let us go even further than that, and say that questions involved in the period before birth or conception, which are coming to be recognized as profound and crucial, are only to be interpreted in the light of the deepest knowledge of child life.

That there must be in this general pursuit of broad intelligence as to health problems, a specific and definite examination of the child problem, admits of no question. It seems best, therefore, that a distinct bureau in this broad movement should be secured. It is true, however, that there are questions of immediate importance which need not wait for this extensive investigation. Among these questions is child labor. As a definite factor in our social economy, the iniquity of its existence is enormous. There is inherent in it the same ethical stigma that there is in slavery or polygamy or in any other widespread national moral obliquity. It ought not to exist, and the intelligence and effort of all right-minded citizens should be committed to its extirpation.

There are questions, it is true, which are open to reasonable difference of opinion. What constitutes the proper age for labor? What are justifiable considerations in determining customs of labor? These are appropriate studies for

a health bureau. Those, however, are outlying territories. The plain unvarnished proposition, that children shall bear the industrial burden of this people, can not much longer be countenanced.

My privilege to address this meeting comes through my connection with the warfare upon tuberculosis. Could one come from a territory more deeply concerned with this issue? Where is found the safety of any individual against tuberculosis? In physique. Where is laid the foundation of physique? In childhood. Where bear the heaviest the burdens of bad hygiene? In childhood. Where concentrate most the direct forces of infection? In childhood. So far as tuberculosis is concerned, there is no hope for the race until the territory of childhood has been fortified. History should teach us to be without surprise that a great people can have gone on to such development with so little foresight.

Foresight is a rare combination of qualities, a joining of vision with judgment; an attribute of maturity; a power by no means universally vouchsafed to men. Myriads of people see the menace of an iniquity, and fainthearted turn aside with a feeling of impotence. Recognition of the difficulty without conviction as to the moral obligation which it implies, accomplishes nothing. Under the guise of conservatism masquerade indifference, timidity, and self-interest. True conservatism is concerned only with genuine progress, hesitates only at mistakes, may be wisely quiescent, but never supine. It is curious that foresight and conservatism having so much purpose in common should be, in fact, so divergent through the major part of their respective paths.

In social development the struggle is always between those who have vision and those who have caution. In this alignment, the forces of caution under the conception of prudence receive very exaggerated recognition and support. Those who have vision and imagination command

undue criticism and discredit. The time has come to act in behalf of the child, and those who see must dominate those who fear to move, and to this end all sympathetic forces must be combined. That there should be any difference of opinion as to the imperative need of properly rearing and protecting the children of the nation, is unthinkable. In fact there is no such difference of opinion. The thought of those who think at all is unanimous upon this subject. The problem is how to combine the insight of those whose sympathy has reached the root of the matter, with the effectiveness of those who have the courage and ability to deal with it. These forces can only be combined under conditions which satisfy both. There must be a broad and evolved policy of correction and protection. There must be a convincing mass of accurate information. So far as appears, nothing offers to satisfy these requirements but a National Bureau devoted to the welfare of the nation as represented in the growing child. We hesitate not at all in adding our influence to the movement in that direction.

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MEDICINE IN THE SCHEME OF CONSERVATION

FOR various reasons I have accepted with unusual eagerness the invitation of your committee to address this alumni body. Chief among these is the fact that the membership of this body is less homogeneous than that of most bodies with which one has an opportunity to confer.

One consequently encounters a more diverse opinion as to the questions touched upon, and is insured a hearing upon the particular phases of a subject which he wishes to emphasize.

It must be clear to all of us that medical problems in general derive their importance and significance from the conditions to which they are humanly related. The abstract problems of science are identical throughout the world. The relation of applied science to its point of application determines all practical use.

The time has come when scientific knowledge and thought is virtually uniform the world over. The utilization of knowledge is still defined and more or less circumscribed by local conditions. In our calling we realize that there is a marked difference in the characteristics of medical practice according to the density of the population in the communities in which it is practiced. Considerations which are of the utmost importance to the country physicians are quite negligible in the city, and conditions in the city which modify the possibilities of medical activity are scarcely comprehensible to the physicians whose practice lies outside. We are, however, one profession, with one motive and one destiny, and it is indispensable that we come to see our calling in its broadest aspect, and that we exercise it upon grounds which are fully tenable.

If we approach the solution of our problem from the

narrow standpoint of self-interest, no matter how just our motive, we shall have a view too restricted to be valuable.

If we approach it from the standpoint of any especial interest, we shall find the same limitation of vision and the same danger of insecure footing and lack of comprehension.

This is a day of generalization. There never has been a time in the history of this country when the tendency to strike sound foundation has been as pronounced as it is now.

The thought of large thinking men is perhaps no deeper nor wiser than in ages past, but the number of minds that are thinking earnestly upon subjects involving the common weal has increased enormously. With wonderful accord men's minds are becoming constructive and conservative, and it is a noteworthy fact that even the terms "constructive and conservative" have taken on new meaning.

To-day it is quite conceivable that a constructive policy may involve a primary destruction, and a conservative effort necessitate most radical subversion of existing conditions. All of this it is necessary to consider deeply, lest we be carried away by enthusiasm or buried in prejudice. It is necessary that thoughtful men and women, even though engrossed of necessity in personal affairs, deliberately and intentionally devote themselves to investigation and agitation of questions with which they are specifically fitted to deal.

It is in the belief that the members of the medical profession are in position most thoroughly to know and most efficiently to deal with certain questions, that leads me to address you to-night.

You have heard used frequently and authoritatively the term "Conservation." You have heard it applied to water-ways, forests, mines, power, farm-lands and fertility, and, in fact, to every department of human industry and commonwealth. Yet least of all has been said about the most important element in the whole problem.

Whether one adopts as a standard of judgment happiness or longevity, industrial efficiency, esthetic development or morality, the factor that stands beyond all question as of first importance is health.

It is too obvious to need discussion, that in the early history of society, preëminence was determined almost entirely by preponderance of health or vigor. Physical prowess was the means to social domination, and, hence, for all that period of advancing social structure, bodily strength was at a premium and natural conditions were operative.

It is probably equally true that, in the successive stages in the development of society, bodily and mental vigor were the essential factors in the marvelous achievements of modern times. With the advance, however, of what we call civilization, the processes of natural selection necessarily and very markedly become modified, with the result that bodily vigor loses its immediate and obvious relationship to success.

The field of mental achievement, related particularly to industrial development, provides a very different footing for the various elements operating therein, and we find to our chagrin that we have reached a point where individual vigor can be apparently ignored and where aggregations of individuals supply by their mass the momentum which formerly resided in high individual quality.

It is not material at this moment that such an economic philosophy is fallacious. The fact is, that our industrial life is built upon that foundation. Why conserve the individual when the supply is unlimited? In nature the most luxuriant growth only just precedes decay, and the question before the world is rapidly becoming how to conserve the products of intelligence and civilization before the process of rot becomes established.

It is true that the intelligence of the last century or two has very markedly increased the average longevity of the race, but it is equally true that, corresponding to that

longevity and potential efficiency, there is an increase of dependence and social defectiveness of overpowering importance.

It would be far from the truth to imply that the ignoring of health conditions, public or individual, is the proximate cause of all this. Obviously, our whole economic conception is faulty and distorted, but, no matter how strictly any particular aspect may be economic rather than physical, no matter how distinctly an outgrowth of industrial struggle a given condition may appear, the path by which the error invades the social structure and threatens its destruction is almost invariably through the physical health of the people. What is being done about it?

Excepting the effort of what we may call the specialist in public health, the world has gone on as though health were automatic, perennial, and perpetual. Civilization has created a new world in which we live and has with wonderful complaisance left us to adapt ourselves to it. The fact is, that what might be called natural conditions nowhere exist, but in place of them are all conceivable degrees of departure therefrom.

Whether human beings withstand the conditions of civilization well or ill, is a matter of circumstance. So far as the whole public is concerned, it is of no moment; conscious, coherent plan to secure this adaptation exists only in spots. The health of the public is adrift and the subject of innumerable vicissitudes.

The importance of meeting this question is beginning to dawn upon our civic mind. Almost abruptly the consciousness of its magnitude has awakened. Millions of people are involved in this consideration, casual, ignorant, and helpless upon this ground. The foundation of industrial life, commerce, and social development is at stake. How well do we see it? At last, darkly, but "indeed revealed."

The greatest subject in the whole conservation movement

is the public health. Upon whom rests the obligation to make this plain? The question answers itself, but is the medical profession, in confessing its obligation, definitely moving to that end? In certain directions, it may be said that it is.

The organic structure of the profession, as it has developed in the American Medical Association, may be of the highest use in focusing and mobilizing medical forces. Even now its public health functions are intelligent and weighty. But let us not forget that our formal organization is the fruit, not the root, of our growth. Let us not forget that, though our pride be in the fruit, our strength is in the root.

Let us not, therefore, invert our dependence and rely upon "The Association" to fulfill our obligations. The root of the matter is the social group: the practitioner, under whatever form or plan he works, and the individuals to whom he ministers. It is under this conception that we can recognize identity of function under all conditions. The responsibility of the practitioner to his group is the idea. Upon that ground, how do we stand? What is that responsibility? Is it a fixed or a changing relation? How well do we meet it?

Am I right in assuming that there is such a thing as a practitioner and his group? I think there can be no question as to that. The practitioner of medicine bears a closer relation, on the whole, to the people amongst whom he practices than any other man. The conditions of his association are peculiar, intimate, and authoritative. By no perversion of his social sense can a true physician accept the idea that his calling is merely a business. He is essentially a minister whose obligations are perfectly clear. To mitigate human misery is the purpose of his life. The question I wish to propound is, How intelligently and how comprehensively do we grasp the possibilities of our vocation?

As men develop in the medical profession, through contact with the problems of health and disease, and through experience fraught with burdensome disappointment and a frequent overpowering sense of futility, they come almost inevitably to the conclusion that the great medical achievements of the world are destined to be found in the field of preventive medicine.

One need only canvass his day's experience with intelligent analysis and honest judgment, to reach the conclusion that he could have achieved a hundredfold more by way of prevention than he ever achieved by way of cure, if he could have controlled antecedent conditions.

If this simple conclusion of a mature, sane medical mind is sound, the premises of the future development of medicine are already defined. It becomes a question of controlling antecedent conditions. I readily concede the enormous difficulties in this conception. I see as clearly as anyone the intricacy with which all social problems are interwoven into this question. No amount of complexity or difficulty, however, in the least degree qualifies the truth or importance of this view.

The health of the people is the outgrowth and expression of their habits of life, and their habits of life are conditioned upon facts imposed upon them by our social organization, which they have neither the intelligence to comprehend nor the power to control. Are we physicians in any better position respecting this?

Although it is obvious that as individuals our control is of necessity limited, there is no limit upon our powers of comprehension. There is no bar to our grasp of the situation. There is no excuse for our failing to realize its importance. There is great opportunity for us to act as educators. The only thing which we need is the thing which we too generally lack, the spirit.

When shall we reach the point when our primary motive is a desire to control the conditions under which people

live? Until we have attained that merit, and until we think and act under that motive, we are in a measure an apology for a profession.

Two things are essential to our development in this direction. The first is solidarity in the profession.

I am willing to consider the merit in organization and solidification in any group of workers upon the basis of self-interest. Self-protection is essential to growth and growth is the essence of efficiency. But that self-interest should be our final and most imperative motive is unthinkable. Unless our organizations proceed toward altruism and social regeneration, they will crumble and become a mockery. Already the day when we cry out for organization, that we may be more powerful for our own advancement, is past.

To-day the shibboleth of medical organization is the public weal. If we seek power, it is to that end, and whatsoever perverts or deflects our organic being from that course is reprehensible and in the end futile. Hence, our solidarity is essential to our progress.

Herein lies the hope of the individual, that he may fulfill his obligation to himself; that he may, by combination and coöperation, come into his full power and influence so far as concerns his purely medical functions.

The second essential to our progress is coöperation with all corrective social forces.

The discouraging complexity of the practical problems leads us unerringly to this conclusion. Conditions of living, in their relation to health, no matter how intelligently comprehended, can not be controlled without the most radical corrective effort.

It is idle to discuss mental or moral or physical health in the terms of a slum. It is wasteful to expend unlimited money on hospitals and other corrective institutions, while at the same time we broaden and deepen the social morass which feeds them. It is immoral laboriously to cut down

the death rate of infancy without assuming the responsibility for childhood. It is as wrong as it is foolish to fight for child life and happiness and permit the social struggle to predestine perdition at adolescence.

All of these things, we know, are inextricably interwoven with our specific problems of health. They are things which must be dealt with by those with social insight and conviction. Part of these things we know better than anybody. Can we upon any theory avoid the responsibility for our part? Obviously, the only way by which we can come to our full measure of service is by earnest and intelligent coöperation.

The time is already here when to be only a practicing physician is a discredit. Not only has the medical profession to furnish its full quota to the army of social service, but in many respects it must point out the way. The pathology of society is as much the function of the medical man as the pathology of human disease.

It is inevitable that, as the intelligent community traces back conditions step by step to their causes, the offices of the medical profession shall become indispensable. It is by this path that the medical profession will come into its final reward. In that day the lack of authority and influence, which we are now disposed to deplore, will disappear. We shall find that our function as interpreters of life will determine our position of usefulness and repute. In the meantime, what are we doing as practitioners? Assuming that our scope is somewhat limited by opportunity, how well are we meeting the possibilities which are before us?

Let us put the question differently. How generally are the people of this country receiving a reasonable measure of benefit from medical science?

When we regard the marvelous advance of medicine, and the things which have been and can be achieved, that are real and permanent, we are prone to be impressed with the greatness of our calling. We must not forget that the

final measure of our greatness will be the breadth of distribution of medical benefits, not isolated demonstration. We must not forget that from a medical standpoint the benefits of science must not be confused with the ability to pay for them. We must remember that the overwhelming majority of our people, upon the basis of material resources, would be denied access to the highest medical resources. We must approach this necessity for adjustment open-minded, and see not only what is lacking but invent a plan to supply the deficiency. It may be that, as the importance of public health becomes understood, and when it is apparent that public health underlies all social development, the State will assume a supervision of health activities as freely and actively as it now supervises education. What the future of that development may be it is useless to forecast, but long before that comes to pass the profession will have to do its work better, more intelligently and more honestly than it now does.

The resources of medicine can not be applied adequately in all directions by any individual. The skilled laborer of the medical profession is the specialist. No amount of criticism or cavil can deprive him of his just valuation. The legitimate criticism upon specialism to-day is lack of correlation among its various parts. We are treating departments as though they were entities. We are dealing with parts unrelated to the whole. We are consequently falling miserably short of real achievement.

The reasons for this are partly crudeness of medical conception and partly economic. The necessity to pay for medical service as we now conduct our affairs means two things: First, scientific and complete therapeutics are limited to the very *few* who have large resources. Second, *most* of the people who pay for service receive it more or less fortuitously, with a woeful degree of haphazard, determined largely by the preponderance of symptoms in one way or another. Though they may receive in one direction

adequate service, rarely can they get a well rounded diagnosis and therapy.

For the mass of people who receive without compensation, escaping consequently the immediate economic obstacle, there is still the fatal inadequacy of our clinical methods. Coördination between departments is almost unknown. Intelligent consideration of outlying conditions, social status, food, habitation, clothing, and mental and moral conditions, is wanting.

We plan on doing this thing or that thing more or less well, but in the vast majority of cases with the utmost futility, because we fail to couple up with the conditions of the problem which determine the final success or failure of our undertaking.

In the face of this gloomy picture, what is the outlook? What is the future? What is to be done?

In the first place, that I may not waste time upon the discussion of material aspects, let us demand that the line between those who can and should pay, and those who can not and should not, be drawn scientifically and rigidly. I do not wish to discuss that proposition now. Let us draw a line that will not necessitate absolute pauperism and dependence in order to get proper treatment. Millions of self-supporting, self-respecting people, who need and will need medical assistance, could not pay for it under existing methods. The line has got to be drawn high in order to adequately serve our people.

But, aside from this question of pay, is the deeper question of medical efficiency. Let us again revert to our social unit, the medical man and his group of clientele. Can he satisfactorily minister to all its medical wants? Obviously he can not. The differentiation in practice makes it impossible. Consequently, for every group of the community there must be a group of physicians. Automatically and casually that is now true, but the pay question again makes it largely inoperative.

The practice of medicine for the future must be "team work." Upon some sound and normal basis of association physicians of different skills must work together. The people have a right to the benefits of science, and I do not hesitate to say that they are not receiving it. Once more let us revert to our method of procedure.

The best work of to-day can be done in a good workshop. The tendency of good individuals and good groups is to get into workshops. The workshop of the medical man is the hospital or dispensary. We have discussed at length who should be treated and who should be refused treatment under these phases. How deeply have we discussed and how earnestly have we felt the importance of the question, How generally are medical practitioners given the privileges of a good workshop?

Under the conception which I am advancing, of medical evolution, this is the burning question. If the unit of medical efficiency is the doctor and his group, and combination of these groups of doctors and their groups, then are we bound to furnish to those groups facilities for the exercise and development of their powers.

The time must come when every man who is fit to practice medicine shall be deemed fit to have an organic relation to a hospital; when the only test of a man's eligibility to hospital opportunity and recognition shall be his willingness and capacity to work. Then may it come to pass that a correlation between all of the inside forces of distinctly medical type will bring about medical efficiency, and then will it become imperative that this high degree of medical efficiency shall not be nullified by failure to protect the extra-medical conditions upon which depend the final results in the social mass. Then will it come to pass that the physician will, as a measure of self-protection, self-development, and self-expression, become a sociologist, and while coöperating with his colleague in his medical labor, will coöperate with his community in its social needs.

By those means and those only can we work out our salvation.

The views which I am advancing and the projects which I am suggesting are neither visionary nor remote. We are right on the threshold of this metamorphosis. We feel that the demonstration has been made. It only remains for us to accept the plain facts before us.

Shall we drift on blindly, following the method of our ignorant and empirical days, or shall we dignify our magnificent science with an enlightened workmanship? Obviously, the problem is ours.

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MENTAL HYGIENE

IT is most embarrassing to bring before an audience of this character a subject which, even if not technical, is so foreign to the usual trend of thought and interest of people as to make it a question of how deeply they may be impressed with its pertinence.

I have no doubt as to the essential importance of the subject. I have no doubt as to the extreme relevancy to the personal interests of the members of this audience. My doubt lies in my ability to make it perfectly clear that it is so important and so relevant as to be worthy of your earnest attention.

I am assuming on the part of the members of this audience, a sense of responsibility as to social conditions, even such conditions as you have had no part in creating, and of such historic and traditional origin that all responsibility for the creation of these conditions is far removed from you. Nevertheless, I assume and assert a responsibility on the part of you all, over their correction. The imminent question in my mind is whether a responsibility which is merely collective can be regarded as a useful or effective power.

This awakens the reflection as to the habitual irresponsibility of masses. It merely emphasizes the reason which lies back of the maxim, "What is everybody's business is nobody's business." The fact is, that conviction is an individual matter. It is only by establishing conviction in the minds of a sufficient number of individuals that masses of people can be moved. It is true that effective work results are the outcome of mass movement. But one must

maintain that individual conviction and a sense of personal obligation is absolutely necessary to the mobilizing of aggregate interest. It is, therefore, upon that foundation that I am about to undertake to awaken in you a sense of the importance of the subject which I present. Before I get through you will have said to yourselves, "What can we do about a matter, as to the facts of which we know nothing, with which we are not in touch, and which is not a matter of personal interest?"

I call your attention to the fact that those things are true at the outset of all the great movements which are finally dependent upon public sentiment for their prosecution. The fact that your management here to-day has established so large a department devoted to the discussion of Mental Hygiene, shows that those who are thinking about the subject are planning to mold public sentiment, and so far as my effort to-day is concerned, I am here for presenting briefly and in a fragmentary way the point of view of a newly created National Committee upon Mental Hygiene.

Before I finish I shall have reached the conclusion that the solution of this whole matter would be simple if we could only establish what we are in the habit of calling "right living." But, I call your attention to the fact that the affairs of this world, the development of social movements, the arrangement of social matters, the prosecution of social reforms, does not move from such a broad generalization toward particular dispositions. The progress of things is the reverse. Things move from the particular to the general.

Improved sanitation, for example, is the war cry of the health authorities all over the world. Yet it reaches its results by taking up, one after another, concrete subjects of importance and solving them in the light of sanitary laws.

One crusade effectively carried on against typhoid fever will do far more than years of precept on the subject of sanitation.

So it is with personal hygiene. The world is alert and keen upon that subject to-day. Yet no one factor has been so influential in establishing convictions and habits as to personal hygiene as has the warfare against tuberculosis. The necessary processes in combating tuberculosis, and particularly in preventing tuberculosis, have illuminated the subject of personal habits to an unparalleled degree, and hygiene has received an impetus which it can never lose.

So it is with various conditions of society in which defective health is a causative factor, we find that the warfare directed against the specific cause of ill health is likely to be the means of disposing of the whole social problem involved.

An example of this is the newly discovered disease in this country known as the "hook worm disease." It is found that this intestinal parasite, known commonly as the "hook worm," is prevalent in practically all of the inhabitants of certain regions of this country, particularly in the South.

For many years we have been regarding the poor whites of the South as a people delinquent, defective, and more or less degenerate. We have seen their way of living, we have seen their appearance, we have seen their inefficiency, and we have attributed it to bad habits and laziness.

The fact appears to be demonstrated that this intestinal parasite, common in tropical and oriental countries, but comparatively unrecognized in this country, is responsible for this whole situation.

The peculiarity of this disease is typically represented in our conception of "white trash." Fortunately, this disease is easily curable, and, by comparatively simple methods, preventable. Before long you will see a tremendous effort made to eradicate that parasite. In the process, that large social group which has been the problem of the South will be regenerated, and that gained by progress from the specific to the general.

So we shall find, with regard to this general subject of Mental Hygiene, that our deepest conviction and our strongest impulse will come from a study of those specific defects in Mental Hygiene which come to our attention in connection with the grave difficulties of the world.

I am going to talk to you to-day of things that are sad and sober, and unattractive—quite in contrast to the buoyant, courageous, and cheerful words that are familiar to you. This is the seamy side of Mental Hygiene, but of the utmost importance to scrutinize.

The world has taken note of all these great social questions with tremendous energy lately. A new conception of the situation has been created. To those who reflect, it has become perfectly clear that the State is most deeply concerned in this matter. For generations the idea of charity and philanthropy has been dominant and more or less operative. It has not achieved its results.

Now the conception of efficiency has arisen. The State has come to realize that this is not a question of charity or philanthropy, but a question of self-preservation. If the State is to progress and develop, if civilization is to attain the rewards which are legitimately due, something must be done to eradicate the processes of decay which are following along with the processes of development.

The time has passed when we can comfort ourselves, in the face of individual destruction, with the reflection that individuals are plenty. The State has discovered that efficiency of its units is absolutely essential to its industrial and social progress. Therefore, the tendency is more and more manifest to make matters of health the subjects of governmental attention. From another point of view, this is of the greatest importance.

Ignoring the facts and principles of wholesome life, has created an enormous army of delinquents and dependents which is yearly increasing. The problem of institutional care and assistance to these classes, is rapidly becoming so

difficult as to strongly array the forces of government upon the line of prevention. It is not only futile, but it is imbecile, to create with one hand conditions of social dependence, and undertake with the other to relieve them. Prevention is the war cry of intelligent publicists in every direction.

There is still another aspect to this question, of deeper significance. The moral integrity of the State depends upon the health of the public. Widespread physical decadence means moral decay. I can not stop to elaborate this subject, but the conditions are aggravated and the outlook, if not alarming, is threatening.

Out of these considerations I derive my privilege to bring before you to-day a subject of the greatest importance. No public question is of greater importance, no subject is more misunderstood and misconceived, than the subject of insanity.

A few minutes ago I spoke of a public movement in which you, for example, could have no interest. With regard to this subject, I know that that is not true. I know that there are scores of people in this audience who, directly or indirectly, have suffered from the conditions brought about by the mental unsoundness of some one.

There is hardly a family which does not touch this territory in some way. Those who touch it at all closely and consciously, know the depth of suffering involved in the conditions. I have said that this is subject to enormous misconception. This is true in several directions.

In the minds of most all people there is a fatalism as to insanity. It is commonly believed that insanity comes on for some inscrutable reason necessarily and inevitably, under given conditions. In making that generalization, so far as it is a conscious process, people utterly fail to realize that there are many kinds and manifestations of insanity.

There are some forms of insanity which absolutely need not have occurred. For example, somewhere from 10 to 20 per cent of all the insane are insane as a latent result

of syphilis. Without stopping to discuss the enormous difficulty of that proposition, I simply wish to point out the fact, that in that group of the insane there is nothing predestined, nothing inevitable, nothing but what is in its essence absolutely preventable.

The next group in this class is due to alcohol. From 20 to 25 per cent of the insane have reached their mental unsoundness as a more or less immediate result of the excessive use of alcohol.

Again avoiding the discussion of that great social problem, I point out to you that there is nothing inevitable in this class of insanity. Every bit of it is avoidable by the avoidance of a perfectly voluntary indulgence.

For the most part, the general public believes that insanity is incurable. Once insane, always insane, is the prevailing thought in the average intelligent person. Yet this is very far from the truth. Twenty-five per cent of all persons admitted to a hospital are discharged cured. Another 25 per cent are discharged sufficiently improved to be able to resume life under conditions of reasonable comfort.

This is true under management of all sorts, good, bad, and indifferent. How much more than this will be true under intelligent and sympathetic management, the future can tell. There is reason to believe that a large improvement upon these percentages can be made.

I want to call your attention now to another phase of this matter, which is not the accurate or statistical phase, but is the individual and human phase.

Most of us look at this matter in its aspect of developed disease. We say, here is an individual who is mentally unbalanced. Deplore it as we may, how much do we really think about it? Do we realize the piteous path that an individual has had to pursue before getting to that state of mental demoralization which we, under our crude conceptions, call insanity?

Consider the type of people who go insane. Of course,

many of low mentality, also many of very high mentality, sensitive, conscientious, perhaps religious, punctilious, refined, and infinitely susceptible to the jars and hurts of life.

Think what one has gone through in reaching this state of demoralization! Doubts and questions, conflict and scruples, self-accusations and fears, suspicions and anxieties and mental and emotional crises and climaxes without number, before that brain has given way under the strain and racking of this internal turbulence. Nothing in life is more pathetic than a true picture of the mental struggle of him who has gone through this path, perhaps knowing whither he tended, conscious that he was losing the fight, in anguish of mind and body, in the face of conditions which he felt himself unable to cope with.

How many of us sympathetically and intelligently travel that path with that unfortunate when we are making our mental estimate? Naturally, few of us, because so few understand it at all.

Perhaps the most radical misconception which we hold with regard to the insane is as to their mental operations. We are prone to think that because they are insane they do not feel or reason, think or remember, suffer or enjoy, as we. As a matter of fact, every one of these things they do more or less as we do; sometimes more keenly, sometimes less keenly, but essentially as we do. The difference lies in their balance, in their capacity to adjust processes to processes, in their ability to apply corrections under judgment.

This lack of balance perhaps subjects them to greater tortures. The philosophy or the reason which a sane mind employs to assuage or mitigate the sufferings of life, is often denied to the insane, so that they are the helpless prey of emotions which they have lost the power to control.

It is of the utmost importance that we should come to realize that the manifestations of the insane which lead us to think of them as queer and abnormal, are not manifestations of incapacity to think or feel, but are curious mental

freaks and devices which they employ under some law to us as yet unknown.

The public and the medical profession have got to be educated upon this point until we have reached the limit of our toleration of ignorant procedures which amount to barbarity.

One of the most serious difficulties in this matter is the legal aspect. Under our present method, the law undertakes to define what is insane and what is not insane. There is a certain justification for that. The abstract idea of personal liberty and personal responsibility on the one hand, and the concrete idea of personal property on the other, combined, have made a reason why the social relations of this subject are tied up in legal enactment. So far as those considerations go, that will probably always have to be. But may I remind you that essentially that has nothing to do with the case?

No statute can define insanity. No court can adjudicate the problems of insanity with any approach to completeness. We have got to go far behind the courts in reaching for the foundation and root of this question of mental disease. Unfortunately, the intervention of the law in this matter has led us into a series of brutalities which we shall have hard work to eradicate.

Do you realize that the great majority of all those who are committed to insane hospitals are committed by a legal process, involving more or less painful court procedure? That a large part of all insane have in the course of their legal commitment passed through lockups, jails, or police stations? Think of the infinite cruelty of these processes as applied to those suffering, sensitive, bewildered, struggling souls!

The correction of this is not so difficult. It, however, involves the next point that I want to call your attention to,—the substitution of the idea of a hospital for the idea of a lunatic asylum.

You have heard wise men say, that if you would take a precept of conduct every day and repeat it time and again during the day, you would distinctly modify your character and mold your disposition in accordance with it. I have no doubt that is true. But it is just as true of other mental subjects.

The conception of a lunatic asylum has so stamped itself upon the public mind that it is practically closed to all of the true, sympathetic, human features of mental disease. That whole mental conception involved in the term "lunatic asylum" has got to be swept away, and substituted therefor has got to be the idea of hospital and hospital care, treatment, cure, hopefulness, effort.

When that day comes, the mental attitude of the public toward insanity will have changed. The day will come when there will be no more stigma attached to a broken mind than to a broken limb. Until that day comes, we are doomed to fall short of an effective dealing with this subject. For many reasons this is so, but for this reason in particular.

The greatest vice that people who are related to mental disease practice, is the vice of covering it up. It is covered up under the idea of disgrace, an unmentionable subject. The result is that those processes go on past the point of hopeful intervention, and reach a stage of developed instability which in many cases never need have been reached if they had been more frankly dealt with.

So it is going to become necessary that we develop hospitals for the treatment of mental disease, more intelligent and more sympathetic than we now have. We must, moreover, have in every general hospital a department for mental troubles which arise in connection with general disease. We must establish a method whereby the progress of the afflicted one must be through the hospital supervision rather than through the police supervision.

These things which look so difficult can all be accomplished. It is a mere matter of conception and adjustment.

Progress is being made of the most hopeful sort in New York State. It will follow along rapidly in other directions.

Naturally there should exist a close affiliation between the forces inside of the hospital and the social force outside of the hospital. There should be a coördination between the staff which treat patients in the hospital, and the families, or the public, or the social workers, or whatever groups there may be, outside of the hospital, to which we look for coöperation.

All this means simply that we humanize our institutions; that we get a sympathetic touch between the social group and the technical, medical group, which will make all move harmoniously in the same direction.

It is evident, from this line of reflection, that the place to begin with reference to mental disturbance is at its earliest possible manifestation. I would say in infancy, childhood, school life, during adolescence, the education of the child in the direction of stability, balance, obedience, poise, is fundamental in this question. We shall come to see this in time. But it is never too soon to begin.

Those who are engaged in teaching realize how little assistance they receive in the home. Those who are observing teaching realize many times how inadequate is the pedagogic force in these broad questions. Both must be improved.

But of all the needs which this country has or will ever have, there is nothing more imperative than the strengthening and up-building of the teaching force of the public schools. Understand me, the public school force is just as good as we have any right to expect under the way we deal with it.

The future will see a broad, liberal, generous provision for the education of the young, and the teaching force will respond to that spirit, and can not possibly improve until that spirit shall dominate.

But aside from this question of school education, comes

the moral and ethical training of average social life. Are our standards, habits, pursuits, under the popular momentum, good or bad? Is life as we lead it calculated to create and maintain mental and moral poise, or is it not?

I am perfectly willing to admit what is contended, that the world is growing better. Is it as much better as the intelligence and insight of this day's civilization ought to have produced?

Without attempting to argue the question of prevailing standards, I simply wish to put forth the proposition that standards can be judged good or bad, according to their influence, direct and indirect, upon mental and moral stability. It reduces itself to this proposition. Right living, right thinking, and right feeling will practically eradicate this question of mental disturbance.

Of course, this is in a sense millennial, but as I have before called to your attention, I now repeat that the way to reach a generalization is by coherent attack upon specific defects.

And the next question is, how prevent this insanity? I do not wish now to stop to discuss the question of venereal disease and alcoholism. Those are the subjects of great social effort which is progressive and bound to prevail to a large extent.

But in these other conditions of essential mental disturbance without outside connections of poison or interference, how preventable is insanity? Nobody knows the answer to that question as yet, but those who are studying this matter most deeply are convinced that if the right conduct with the individual who is getting "shaky" could be established, a very large part of the insanities could be prevented. And this means not only kindly effort but intelligent understanding, accurate interpretation, expert analysis of the mental operations in question. It means a sympathetic relation which in itself is very difficult to secure. Nevertheless, in spite of the difficulties, it

is clear that progress must be secured upon that line.

The tendency of all of us is to ignore or discredit mental peculiarities. Every careful history of an insane person shows a series of incidents which, if they had been properly apprehended, would have brought curative influence to bear upon the individual long before, perhaps years before, anything was done.

We have got to take these questions of mental peculiarity seriously, and seek expert advice with reference to them. We have got to create a body of experts whose advice can be sought, far beyond anything which now exists. By that very process of taking notice of early manifestations, we are going to establish saner, truer, more wholesome standards of living. All of this will work together finally for public sanity.

Efforts in this direction must not be merely eliminative, they must be constructive. We must learn the law of mental growth and apply it. We must learn the law of moral awakening and adjust it. We must find the influence of habits upon mental and moral processes and build them wisely. All of this is the territory of prevention, the very essence of all constructive effort in the world.

And now the question would be very pertinent, for whom am I speaking? Why am I here to-day addressing you?

Briefly, it happens in this way. A man in Connecticut, by the name of Beers, was for a number of years insane. He was confined in various hospitals, had various experiences, and ultimately regained his balance. He came through that experience with an accurate memory and an acute perception of everything that had happened to him, a clear recollection of all the perverted mental processes that he went through, a keen sense of the misinterpretation to which mental processes were exposed, a very temperate resentment at the unnecessary hardships and brutalities which he experienced, the outgrowth of a system and not of personal default, and all this he imparted in one of the most

remarkable books of the age, "A Mind that Found Itself."

With tremendous conviction and singleness of purpose he has devoted himself to the amelioration of social conditions as they bear upon the question of mental integrity. He has formed a society in Connecticut, which is doing effective work.

He conceived the idea of a National Committee which should do a comprehensive work in this direction. He selected a Board of Directors from all over the country.

I am here speaking a word in behalf of that Committee.

A proper question is, what is our program? At the moment it is rather indefinite, and yet in a general way I can say to you what we propose to do.

In the first place, we need money to carry on an effective work. We hope to get that from some source. As the next step, which seems logically to be the last step, which we shall probably pursue, we propose actively to take up what is known as after-care of the insane. That means the establishing of relations between patients who are about to be discharged as cured, or partially cured, and their outside work, establishing a connection which will continue a wise supervision out into their social relations. The value of this is two-fold.

In the first place, its tendency is to prevent relapse by foreseeing conditions unfavorable to the individual and preventing their harmful operation. In this way probably a very large percentage of the relapses can be prevented.

But, more than this, and probably far more important than this, will be the relationship which becomes thereby established with the family and group and entire social circle of the individual.

In establishing a harmonious relation in this way, there is no doubt that a great deal of impending mental disaster can be averted. It is one of the ways by which early contact with mental disturbances can be secured.

Please realize the difficulty on this point. Supposing,

without any entering wedge, we undertake to go to a family which we know to be more or less vulnerable, and say: "You have a bad family makeup, your family history is bad, you are all liable to go to pieces mentally; we want to fix it." Imagine, if you can, anything more impossible to accomplish than results upon such a basis.

On the other hand, if you can go into that situation naturally, carefully, and with a sympathetic connection already established through an actual patient, there is practically no limit to the access which can be secured. Whatever results are possible from such early access can be achieved. Those are the merits of "after-care."

Next, our program is education, spreading, broadcast as we may, correct ideas about insanity, mental balance, mental hygiene, right living. A sample of this effort is my talk to-day.

And next, we shall attempt to effect legislation, to so alter the laws and the procedure as to fit in with this fundamental conception of mental unsoundness.

As a preliminary to that legislation, we must have popular opinion. Legislation can not go much beyond public opinion, and it is our desire, and it will be our effort, to create public opinion as fast and as widely as we may.

And now, the question is, What do we want from you? The answer is simple—merely a hearing, merely a fair judgment, as to the soundness of what we set forth, merely a sense of its importance, and, growing out of that, a conviction as to your relation to it.

We want a hearing, and we feel confident that as a result of a hearing we shall found an individual conviction on the part of practically every one as to his obligation to help where he can.

I do not hesitate to say, that of all the great public movements that are going on for the correction, the amelioration, of social conditions, there is none more important nor more deserving of your earnest attention.

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UPON WHAT GROUND MAY THE STATE ASSUME THE DIRECTION OF PUBLIC HEALTH?

OF course I am gratified to be permitted to participate in an occasion of this sort. I am gratified to be enabled to give the slightest word of recognition and appreciation and admiration to those who have labored as volunteers in the creation of this public work as far as it has gone.

I should be a little bit embarrassed, perhaps, to come here from a State that had not crossed the threshold of this subject to talk to the people of the State which had penetrated much farther into the subject; but, after all, it is a common cause, and whether one is farther ahead than the other is of little moment. From another point of view I am on more familiar ground. I am on the ground which is being agitated by the question whether the public, that is to say, whether the organized forces of the State, shall take over the activities of the tuberculosis campaign, or whether it shall remain, as hitherto, in the hands of the highly competent, but nevertheless private, individuals who have carried it on; and it is upon this phase of the subject which I shall speak, and I shall confine myself as near as may be to this question.

It is quite unnecessary to argue that any enterprise in this country, social or philanthropic or commercial, is necessarily a governmental function. We know better than that. When one stops to regard the efficiency, the enthusiasm, the unselfishness, that goes into the voluntary work directed in this warfare against tuberculosis, one knows that private individuals and groups of individuals can manage, finance, and execute, to the highest degree of

efficiency, the operations, for instance, of a tuberculosis warfare.

One knows, moreover, that in many instances, they can do it better, with more economy, and with more incisive intelligence probably, than is at present fair to expect of governmental agencies.

All these things we know in favor of the private organizations which your State has demonstrated so fully. When we stop to think of the natural history of this thing we find how these movements start. The need is first evident to an individual or to a few individuals. The spirit of social reform starts these things. A group comes to a recognition of the importance, and before you know it, there is a great mass of impulse in the community looking toward the supplying of this great need, namely, succor and prevention in this direction.

Who goes into such a thing? Public spirited, high minded, intelligent citizens go into it first in a heartfelt way, without the slightest possibility of gratifying ambition or of fulfilling any self-interest. They carry this thing on to its fullest extent. Does that measure the good of this movement? Is such a movement started by private citizens, and carried on by disinterested people in the community, to be measured merely by administrative efficiency? Far from it. And this I want to call your attention to as of importance: These movements, these organized efforts carried on by private individuals, upon private initiative, represent the very highest fruit of human civilization. They are the moral expression of the people, and, as such, they have in them the hope of the future for this people; and these considerations are not to be ignored when we come to consider the difficulties of handling the machinery of these things.

It is true that most of these movements start with the idea of making a demonstration, of showing what can be done in a given direction; and things are done with that

in view. Most of these movements have an undercurrent of thought in them, which, if it were expressed, would be: "We will show the State, we will show the government, what to do, what can be done, and the government will take this over." That is the undercurrent that is present in all organized movements of this character.

Money, time, energy, intelligence, public spirit, have been poured into this work in New Jersey. Great things have been achieved. Magnificent things have been accomplished. It is perfectly clear that the people that have carried this work on so far are perfectly capable of carrying it on farther. Moreover, by just as much as any group of the people has been self-charged with the responsibility for the welfare of the body politic, by that much has the body politic been leavened by an ethical perception.

We must not forget, in the enormous importance to this whole movement, the participation of the people voluntarily and primarily in the movement. Why, then, with the theme which can sum up like that, agitate the question of turning it over to the government? I confess that there are many misgivings that come to one under those circumstances. One hesitates a good while before he would willingly sweep aside these activities and turn them over to mere officialism.

We see primarily why these things start. We find that it is easy to start a small movement; that it is easy to start it and develop it along its proper lines to a high extent; and therefore, it is a natural way to start. Thus the efforts of private organizations are able to make a standard of activities which it is hoped the public activities can not recede from, and so it is with reference to this standardizing that there is a great deal of private effort set on foot.

Nevertheless, the question always is, if this is turned over to government forces will the standard be maintained?

Now, taking all these things into consideration, taking into full consideration and giving full weight to all these things which are perfectly true as being the qualities inherent in private philanthropic operations, one is forced to the conclusion, after all, that the foundations of such organizations and the foundations of the work done by such organizations are not sufficiently broad.

Consider for a moment many of the questions which are of importance for the people to take up and which these organizations attempt to take up. They are questions not of any faction or section of the people, but questions of the whole people. Let us confine ourselves, if you like, to the question of tuberculosis.

There is no person who is not menaced by tuberculosis. It is a race question. It involves, in point of time, generations. It goes to the very root of the human constitution.

Can any plan for dealing with it be too broad or too deep or too permanent? When one stops to think of that, when one considers the enormity of tuberculosis, when one considers the amount of grief and suffering and heartrending life that is involved in it, when one considers the enormous vital and economic price that is paid for it, when one considers the mental and moral and physical tribute that is paid it, can anyone doubt for an instant that it is the business of the State?

What the State can do about it is a question. Let us for the moment put aside entirely and permanently the idea of charity. Let us wipe out the question of charity, and let us put this State activity upon the ground of self-preservation. Upon that ground, what are the limits that can be imposed upon the activities of the State? I repeat, the grounds of the private organizations are too narrow, and they are too narrow, first, with reference to the question of stability. Private organizations are unstable, in respect to their personality. It is a fact well known to all workers, that it is a difficult thing to recruit.

the forces of these private organizations with individuals who are satisfactory. This in spite of the fact that the community is full of individuals, but there is no correct and sure way of assembling them. To be sure, this situation is being proved in a measure. People are too busy, and it drops into the way of being executed by experts, and yet what do experts involve? Experts involve money; they involve pay of salaries, and they involve large amounts of money for the carrying on of any of the activities — which brings us to the next element of instability; that is to say, the pecuniary element. It is well known that the pecuniary factor in this situation is a difficult one. Pecuniarily, these organizations are always in a bad condition. Nothing is more deadly than that. Nothing is more stifling. There is no such psychological drag anywhere as to have a doubt and uncertainty as to whether you can possibly get money enough from the public, no matter how generous, to carry on a definite line of work. It goes without saying that if there is money in the community, some plan should be found whereby that money can be readily and certainly found.

Get it and expend it without taking away from the skilled workers their energy and system and their inspiration in the struggle to raise the money.

And the second thing that I would call your attention to, as inadequate in the foundations of our private sympathies, is lack of authority. Wherever there is a public activity going on, there comes a point where there is a clash between public interest and public prejudice. I do not care whether it is a milk-supply, or vaccination, or plumbing, or housing, or juvenile court, or tuberculosis; wherever it is, there is a clash between the agencies of the activity and the general static condition we call public prejudice.

Until the public as a whole assume responsibility for activities, until they get behind these movements and until

they delegate the execution of these movements to their home agents, this question of a clash of authority is never satisfactorily settled, and as long as it exists there are sometimes insuperable barriers and always delays, and this question of authorities renders it entirely important that we should have a strong force recognized by the people, behind the ordinance, whatever it may be.

And the third thing I want to call your attention to is more important than all, and that is the question of correlation. The farther we go in sociological work, the more we find the dependence of part on part. It does not make any difference where you start, all lines diverge, but are inter-dependent; whether it is a question of tuberculosis, or school rooms, or playgrounds, or child labor, or factory conditions, or wages, or whatever it may be, those questions are inextricably bound together. And the difficulty is that unless some plan can be found whereby these activities and the attention that is devoted to them go along in consecutive and coördinated lines, the very best achievement that you can make in one direction is rendered more or less futile by lack of achievement in others; and it is for that reason that a broad governmental control is in the highest degree desirable for the correlation of the things which must go together in order that any one of them may succeed.

Of course, this seems like a far cry. It seems as though it were a great way off before the intelligence of the people would reach a point where it would grasp and encompass an effective plan. But in the meantime, there is no reason why there should not be coöperation. There is no reason why governmental agencies should not coöperate with the private agencies looking to the time when they shall be taken over.

Now, there is no reason why—I am not talking about the particular citizens of New Jersey this minute, but in general—the government should not aid with money these

private organizations that are found to be effective. There is no legal reason why, no reason why of any kind; and, after all, money is not the chief difficulty. The chief difficulty in these matters is to get the official life of the State awakened to a point of responsibility, awakened to the idea that something must be done, the legislative, administrative officials, *et al.* It is sympathy that is lacking, not money. Money comes easily after sympathy.

One thing more is this: Suppose that we could this minute turn over to the State the activities of these private organizations. Supposing that everybody that is carrying his burden could just discharge it onto the State, and supposing the activities of private individuals in the cause should be withdrawn. The loss would be incalculable.

I do not hesitate to make that statement. The loss would be incalculable, if the interest of the people who are doing this work up to this time were to be withdrawn by any such substitution. Let us not forget that. Is there any reason in theory or in fact why official, social service should have a strong line of demarcation from non-official social service? I say no, and I say that official association with non-official boards, non-official advisers, councils, auxiliary councils, has got to come, in order to conserve the conscience and the civic intelligence of the people who thus far have shown themselves so abundantly able to carry the burden. You will see that I am not disposed to take the State as a dead thing, nor as a mere aggregation of people and things. I am told to take the State as an idea, the expression of the coördinated choice of the people, and its function is only limited by its relationship to those purposes. And, therefore, we are in hopes that the government will see that its obligation is just as broad as its opportunity, and we are in hopes that with regard to public health matters the government will discern in the matter the opportunity for a comprehensive, consistent, coöperating policy, the opportunity to justify the ideals of democracy.

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SHOULD THE PUBLIC SCHOOL BE THE BULWARK OF PUBLIC HEALTH?

WITHIN a month there was held in the city of Chicago a National Conference on Criminology, conceived by the officers of the Law School of the Northwestern University, as a means of celebrating its fiftieth anniversary, and designed to consider, primarily, criminal law with reference to its correction and reform.

Incidental to this purpose, came, as a matter of course, analysis of conditions underlying the causation of crime and delinquency. If the deliberations of that conference could be carried to their legitimate end, the conclusion would be reached that effective dealing with crime lies in prevention, and the further conclusion would be practically unanimous that the pathway to prevention lies through education.

At the last International Congress on Tuberculosis, wherein was gathered the intelligence of the civilized world concentrating its power upon this great public question, it was concluded, as it has been concluded before and since, that the ultimate solution of the problem of tuberculosis must lie in the territory of prevention, and it was and is further concluded that the essence of prevention, the indispensable factor looking thereto, is education.

At all the active world conferences upon political conditions looking to the betterment of the social structure and a higher type of living, invariably and unerringly the line of analysis runs through the prevention or avoidance of evils, back to the fountain head of human intelligence — the culture of the human mind.

Finally, and most impressive, the field of medical science has been brought under this illumination, and medical intelligence to-day stands firmly upon the ground that the combat with disease is fundamentally a question of hygiene,

which, being interpreted, means a question of prevention, and this, in its last analysis, means a question of education.

This universal reference of the great problems of life, back through whatever steps may be involved, to the training of human minds, that is, to what we call education, is a little suspicious. It looks as though the tendency of this reasoning were to get back to a generality and to suggest a result more or less unattainable in its remoteness. In fact, to some extent this is true, and in so far as it tends to place the responsibility for conditions upon antecedent conditions at the moment irremediable, it is a source of weakness.

The fact that to-day we face conditions which had their origin far back does not in any sense justify our neglect of present results, nor lessen our obligation to struggle with the morbid conditions which we find; but quite beyond the efforts of the world to deal with its social diseases in their present form as best it may, lies the obligation to transform this generalization — prevention through education — into a militant activity which shall ultimately achieve the correction of our social errors.

For the most part the possibilities of education are concentrated upon the education of the young, and the logic of the situation leads to certain conclusions which have yet to undergo a tedious probation before they become effective convictions.

One may view the progress of events with weariness but not discouragement, with intolerance but not impatience. Under this broad social conception, how long will it be before the nurture and culture of the child will be regarded as the greatest question open to the operation of human intelligence? How long will it be before the world is convinced that the greatest of all professions is the profession of teaching? How long will it be until the spirit of the public towards its educators is one of broad and liberal sympathy, which shall place them socially and materially upon a plane of commanding superiority?

I refer to this question of the status and function and recognition of the teacher, not for the gratification of voicing my own appreciation, but because the theme which I am about to discuss and all possibility of a practical bearing to my idea is predicated upon a competent, intelligent, and progressive pedagogic body.

My belief is that the maintenance of physical well-being or health is fundamentally a moral question. In this statement I do not mean to reiterate simply the doctrine to which all subscribe, that we are under moral obligation to secure and maintain in our children the best possible health. That is obvious and accepted, and, in a more or less effective way, strived for.

What I wish to enunciate is, first, that the moral progress of the race is dependent upon its physical well-being; second, that an intelligent building and maintaining of health is a function of character and inseparable from a healthy *morale*.

If health were universal and automatic and the social conditions related thereto better, it would not be so easy to discern this relationship to race progress. A study of social conditions as they are, yields the most convincing proof of the enormous importance of defective health in the causation of social disease.

It is, of course, to be admitted that industrial conditions and a variety of inequalities of opportunity and capacity have much to do with bad health; but it is also true that, even under the existing laws of society, the health of the people could be vastly better than it is.

Whatever that relationship may be, analysis of the situation shows clearly enough that poverty, crime, viciousness, and inefficiency are preponderatingly due to defective physical condition.

The bearing of this is co-extensive with human pursuits. In infancy we have learned the lesson of the "bad" child; in school we have learned the lesson of the backward

child; in sports, the incompetent child; in the factory or workshop, the inefficient hand; in asylums and almshouses, the defective individual; in the courts, the habitual criminal; in the saloon, the besotted *habitué*; in society, the invalid parasite; in business, the perverted marauder; in the pulpit, the distorted bigot; in the schoolroom, the nervous critic—all of them harking back to a foundation of imperfect health for the common factor in explanation, and even in extenuation, of their faults.

Statistics are open to interpretation and hence not to be followed too closely; nevertheless, extensive observation throws much light upon these questions.

In the great cities, broadly speaking, 85 per cent of the relief extended through organized charity is made necessary by sickness and accident. Our increasing social delinquency, growing out of poverty and its necessary conditions, is thus directly and causally coupled with ill health. That these unfortunate conditions in turn produce and aggravate disease, establishing thereby a vicious circle, is beside the point.

The fact upon which we should focus our attention is, that imperfect health is an effective barrier to individual development and an enormous clog upon social progress.

The impression prevails widely that ill health is unavoidable and that most conditions of disease are not only inscrutable, but that they remain at a certain degree of destructiveness unaffected by human endeavor or intelligence. This is positively untrue. The average duration of life has increased markedly in the last few centuries, and this increase is noticeable in direct proportion to the progress in civilization of the various peoples under observation.

This is true in spite of the fact that the conditions of urban life operate strongly in the opposite direction. What the showing would be if this entirely removable incubus were to disappear is a matter of conjecture, but enough is known to warrant us in saying that public health is

susceptible of improvement to a very great extent, and the sentiment has become fixed in the minds of students of social economy that this is the greatest conservation field that is before us to-day.

It appears that this matter of adjusting mass conditions is to be the function of the State, and it is consequently imperative that all of the factors or units of influence should be rapidly and effectually alligned in furtherance of this governmental control. It is not going to be enough that schools be brought under medical inspection and organization on the basis of health. The most that can be accomplished thereby will be inadequate to meet the conditions. Habitation, food, and habits are factors of equal importance, and the real and ultimate problem of the school is how to become an effective influence upon this outlying but essential territory.

Is it too much to anticipate that the school shall become a social center; a reservoir of intelligence as to living conditions, into which shall flow streams of social influence tending to universal betterment, and from which shall emanate the laws of intelligent living?

Unless we conceive an entirely new machinery so related to our governmental structure and so related to our child nurture, we have no other alternative than to settle upon the school as the proper instrument of popular culture. So far as I can see, no better instrument can be desired. Our machinery exists, and what we now need is inspiration. Where shall we look for inspiration? I am convinced that it is only to be found in widespread opinion as to values; in the deep and fundamental conviction on the part of an intelligent minority as to what are the essentials in education; in a thoroughgoing recasting of our views as to what the State owes to its people, that is to say, to itself.

Too long have we gone on under a conception of education that aims to provide a child with a minimum amount of information looking to its economic independence, and

too superficially we have touched the problem of culture and spiritual development, without which life never rises above the dead level of material existence. Too exclusively we have concentrated upon simple mental acquisition more or less rudimentary, ignoring the great forces of life which are sweeping on irresistibly to results dire or benign, according as we adjust ourselves to them. Far too uniformly have we permitted the pressure of circumstances to drive us to the illogical position that education of the child is a dual process, partly to be done in the school and partly to be done in the home. In short, educational effort in general has failed to conceive the development of the child as a coherent process, to which it is bound to contribute a comprehensive sympathy and discriminating judgment as to values, and a firm guidance and authority expressed in the broadest and simplest curriculum that can be made effective.

I beg you not to convict me of ignorance of the vast chasm of disappointments which is suggested by the foregoing stipulation. The danger and the difficulty in the whole proposition is expressed in the term "ineffective." Well I know that the path of education is strewn with failures of good intention, initiated in this spirit and wrecked upon obstacles presented by existing conditions. All progress is like that, and it offers not the least reason nor excuse for abating one jot the effort to find a way out of the darkness. For the most part, failures have been legitimate and foreordained. Even where obstruction has been due to lack of vision and comprehension on the part of that mass of the community known as the intelligent class, which has dammed the spirit of pedagogy with the odium of fad-ism, failure has been logical.

We are in the midst of a material age in which an economic problem is scrutinized in the light of its commercial relations, and the preponderating mass of people who have advanced to the point of thinking about it at all

have advanced only to the point where they can regard immediate industrial efficiency as the sole desideratum.

When the mind of the public has reached the point where ultimate life efficiency shall have equal weight, then may the public school have a clear field and a comprehensive function. To this end, those who have vision must lead, and in this effort their foundation must be broad and deep and sound.

It is from such premises that one is entitled to the belief that the public school has no deeper obligation than to assume responsibility for the physical education of the child. If it were simply a process of decreeing good health, this would be true. If it were a laborious process of working out and bestowing good health, it would be true; but where the process of achieving good health involves the operation and integrity of every mental and moral fiber in the individual, this obligation becomes overwhelming and paramount.

Let us not be misled by the thought that the child is a natural animal, pursuing the course of nature and adapting itself, as intelligence grows, to its environment. Exceptionally this is true, but very exceptionally. Conditions of living are artificial; habits are imitative, and general conceptions of life are faulty.

On the whole, the maintenance of sound health must be a conscious process, intelligent and intentional. Does this seem to foreshadow a burdensome and unattractive mode of living? Surely, to be constantly considering one's health, the pros and cons of conduct, the better and worse of method, and the good and bad in pursuits, all with reference to one's physical well-being, must be unwholesome, must it not?

The answer to that query is simple. It depends entirely upon how one does it. One can do that thing in a way to make life so unlovely that it is not worth preserving. One can magnify luxurious conditions of comfort,

the solicitousness of precaution, hair-splitting definitions of hygiene, superficial trivialities of vanity, to the point of outrageous and disgusting selfishness. Better by far that the world shall go on and find its solution in the most unthinking struggle for survival than that that spirit should be fostered or tolerated as a phase of education.

As a matter of fact, the very falseness of this conception determines the failure of such an effort. No health was ever achieved upon that basis. The conception is wrong, the purpose is wrong. The dominating motive under this idea is timidity, fear of ill health, and avoidance of discomfort. It is essentially a negative impulse, unbalanced, querulous, and cowardly. It makes people dependent, victims of their own distorted minds, a burden to the strong and a prey of the unscrupulous. Perish the thought that we should counsel cultivation of that sort of self-consideration!

The idea of physical integrity glorifies the body to the point of willingness to make the sacrifices necessary to maintain perfection. I think the word "glorifies" is not too strong. I speak not of pride of bone and brawn, of physical prowess or beauty or skill; all of these are of it, but not it. I speak of that sense of well-being, courage, self-reliance, hardihood, and harmony with nature in the individual whose physical equilibrium is the product of intelligent living and the object of conscientious attention. Herein lie power and freedom. Are these not a foundation for glory?

Unusual natural endowment is no necessary part of this. Undue physical development is quite apart from it. That person is exceptional, no matter what his natural limitation, who can not attain the physical poise necessary to this great emancipation.

I fancy I hear the comment, "That is not physical poise; that is mental poise." They are inseparable.

It is true that inferior physical status can be dominated

in a measure by mental effort. It is true that the results of physical disability can be mitigated by spiritual equilibrium; but, taken by and large, mental activities pay tribute to physical condition, and physical aberrations dominate, deteriorate, and destroy as inexorably as do other physical and chemical forces which control the course of the world.

It is small wonder that those who have seen and appreciated the maladjustment of life, in which mental and moral instability play such a part and permit such havoc, should strike at this point as the root of social disease.

While estimating these factors at their full and true value, those who know this subject most deeply know that there is a territory in which actual and demonstrable forces play, unconquerable by will, uninfluenced by thought, acting and reacting with perfect relation of cause to effect, which are the product and logical sequence of conditions antecedent and more or less avoidable.

The educated medical mind knows this. To a distressing degree it does not know what to do about it. Much of the physical perversion which we call disease is terminal and fixed. Naturally, then, the medical mind seeks the sources of disturbances, strives to detect the earliest departure from the normal, and reaches the conclusion that the effective effort of the race must rest in maintaining the normal.

If this were susceptible of mass control, and if we could determine and define the canons of health, adherence to which would insure the health of all the people, the problem would be comparatively simple. To determine the facts would be the first step. To establish the authority necessary to universal observance would be the second step. So far as I know, neither of these steps has been suggested as possible by any careful mind.

The detailed facts of hygiene, though susceptible of some generalization, are essentially individual, and an individual's study of his equation is the important need.

Observance of detailed and intimate modes of life on the part of an individual can never be reached by edict. The motive and authority for this is internal and comes only in response to consciousness of the importance and dignity of the subject. From the point of view of an educator, therefore, the question becomes like any other question in education: not simply what material to present, but how to secure its assimilation.

All teachers know the subtle evasiveness of the child mind in the face of coercion. The precept which a child does not finally incorporate into his philosophy is lost. Mere instruction offered to the young as to laws of health is almost useless. Here and there a general principle hammered enough and reiterated enough may serve as a rallying point for a later intelligence, but the real fabric of education is woven in the experience of daily life. So it is that I say that the physical education of a child must be determined by something that is basic, by a receptiveness that I believe can be furnished only through evolution of an ideal of physical development.

Let us not make the mistake of thinking that the child and the adult could reach this result by the same path. The adult, if he reaches this conclusion and adopts it, does so by a process of annexation, belated and imperfect. The child, if he gets it, grows it, and it is a part of himself, unconscious, at first, and largely automatic. Never will the result for the child be achieved until the adult who rears him has adopted the ideal. To you, therefore, who are entrusted with the young, and I think with the responsibility for the future of the world, I make this earnest plea: that you take this matter at its full value; that you surround it with all the color and all the quality possible and necessary to its attractiveness; that you dignify the subject to the point where you are willing to give it commanding importance in the curriculum at any point.

Assuming your acquiescence herein, what is necessary

to do? What is it necessary to be? Why speak of "sacrifices necessary to the maintenance of health"?

The world lives not by thought but by imitation. Fashion controls the activities of life and, curiously enough, there is a constant mimicry of the so-called "classes" by the masses. There is no doubt that this is an unconscious tribute to what is assumed to be cultivated intelligence. Nothing better expresses it than the keen analysis of a laboring man whom I once heard exploiting the subject to a fellow laborer, who was commenting adversely on some fashionable people who were dining out in public view. With a fine irony he rebuked his companion, saying, "Jim, they're layders," and when Jim asked, "What the devil is a layder?" he replied, "When folks get to do in public what common folks does in private, they're layders." Is it not true that this is the way we fashion our lives?

With the progress of civilization comes steady increase in the facilities for living. Convenience and comfort are generally increased. Resources and materials for furthering activities and happiness are enormously developed. The result is that, for the people who have access to these resources, the line between necessities and desires is lost and we find acquired a myriad of wants which, for the most part, are confused with needs.

Avoiding all discussion of these as an economic question, my theme directs me merely to a discussion of the good or bad in this in relation to physical well-being. One can not go into this in detail, but it blocks itself out in thought clearly enough. Given the ability to procure unlimited food, what determines the amount and character of the food that we eat? When all things are available, what guides us in our doings? When we have a distinct choice as to the amount of physical labor we shall perform, upon what do we decide the question? So with our sleep, so with tobacco or alcohol or narcotics, the question is pertinent, Upon what ground do we adopt and pursue our daily habits?

I venture the assertion that for the most part the grounds are two, fashion and self-indulgence.

Although I am predicating unlimited access to things, this indictment is by no means confined to persons of wealth. Almost everybody above a certain level has sufficient choice in this matter to participate in all abuses. Does any one of us underrate the difficulty of selecting a path divergent from the common, and more or less counter to it? Stop and think. Are not all our personal and domestic habits fashioned upon a conventional method which is modified from time to time by influences which are arbitrary or accidental?

Without attempting to dispute that the gradual working out of a method of living by a people in the process of civilization has a certain *a priori* sanction as a phase of evolution, I assert that, in matters of health, this is especially open to scrutiny and review, and so far as we fail to act individually, we fail to exercise such discrimination.

Every practicing physician knows the difficulty of inaugurating new habits in those whom he has occasion to advise. The reasons for this are many. Sometimes it is embarrassing to be different from other people. Sometimes it is disagreeable to do a hard thing, when an easy thing is at hand. Sometimes it is a bother. But the real difficulty lies in the attitude of the individual toward the project.

He goes to a physician looking for dictation rather than light. He accepts whatever he may get on a basis of obedience rather than instruction. In short, he is seeking a compromise on the score of his comfort, rather than knowledge to fortify him in a real desire to maintain an ideal.

What the physician encounters is typical of the usual attitude. It takes self-discipline to be abstemious. It takes self-respect to be individual. It takes self-possession to be undisturbed in the confusion of social opinion and prejudice. For that reason, I say health cultivation is a function of character.

Granted all these attributes of an intelligent individual, there still remains a necessity for a true conception. There is basis for morality in physiology as there is in theology. It is as false in physics as it is in ethics to determine conduct on the basis of penalty. Let us fix this distinction clearly. We live correctly not to avoid disease, but to attain our birthright. The principle is constructive; the obligation is supreme.

The point is to obtain the best individual development that is possible. The process must be through demonstration and interpretation. Is it not perfectly obvious that this can only commence in childhood, which is tantamount to saying that it must be accomplished in the school?

I protest earnestly against any philosophy which tends to obscure this obligation. Let us remember that to be charged, to the degree that teachers are charged, with the welfare of humanity is an awe-inspiring responsibility. Decisions which are reached must not be matters of taste or fancy or idiosyncrasy. They must be right.

I admit freely that to establish this conception of physical well-being generally is not only enormous in its magnitude, but a reversal in human philosophy. So much deeper, then, the reason for grappling with it, so much more satisfactory as an opportunity for real achievement.

Logically, the first step is so to determine the sanitary conditions of our custody of children as to promote and insure their well-being.

Actually, this desirable position is far off. A campaign of education of the public—lay, pedagogic, and official—will have to precede any satisfactory advance. Let us remember that the child of to-day is the public and official of to-morrow, and take heart. Meanwhile, there lies within the control of school teachers a powerful influence. The factors in this are two: the curriculum, and coöperation with the authority of the State.

The public health function of the State is nowhere more

potent than in its relation to the school. In the existing state of society there is a tendency to clash between school authorities and school population. There is a territory of intimate mutual interest lying between the school and the home, in which neither has indisputable authority. It is right and necessary that the State occupy this field and determine the law that shall govern these reciprocal relations.

For the present it is important that there be public supervision of such a character as to give continuity to the efforts that are initiated in each territory as they spread into the other. Hence, for example, the importance of reinforcing school inspection by visiting nurses or of counter-acting parental laxness by official inspection. We shall see that the State will broaden its interest and responsibility in these matters until protection is realized. Necessary as this is on the basis of protection, if it is well carried on it becomes of important educative value and will enhance the public appreciation of intelligence in living.

The school teacher can perfect or ruin this attempt according to his efforts in coöperation. Though it falls far short of a solution of our problem, it is obviously the first step and is imperative.

As the idea of the social character of the school grows, opportunity to touch effectively the real life of children will broaden. When the day comes that the child seeks his light in the school as naturally as he seeks his orders, the school will have come into its own.

At present, the great limitation upon the school is in lack of facilities. Tradition and economy are hard masters. Overcrowding, bad air, poor light, imperfect seats, and insufficient teachers are charged to lack of money. Rigid ideas as to confining children hour after hour to their desks like cattle in their stanchions, prolonged pursuit of mental tasks, unrelated to interest and unassisted by inspiration, are chargeable to tradition.

Lack of money is not really lack of money. It is lack of willingness to divert money sufficiently into its proper channel. It is really lack of conception.

Tradition is not insuperable. It is to a very large extent an obstacle, because teachers are insufficiently represented in the councils which determine teaching methods.

The interest of teachers can be stifled by sufficient non-participation in the intellectual activities involved in the school management. No part of the curriculum is more vulnerable to stupidity than that which concerns the physical well-being of children. No part is more in need of initiative on the part of the teacher. We are bound to do this work better.

I repeat, the process must be through demonstration and interpretation. Can we hope for any impression upon the developing child unless we furnish that child obvious, hygienic methods during his school life? Can we hope to derive full benefit from the most perfect hygienic conditions unless the significance of these conditions is interpreted?

The child must grow its conception, and there must be concurrent and incessant association between proper conditions and appreciation of their value.

For our possibilities of demonstration, we must plead with the public for generous and enlightened disposition of funds; for our interpretation, we depend solely upon pedagogic force.

Let us ask this question: To what extent is the average school curriculum based upon or related to the physical needs of the children? I do not mean to imply in this question that it is not to a considerable extent so related. Is it, however, fundamentally determined by those needs? Ought it not to be?

Let us approach the question from another angle: What is the attitude of the school authorities in the most enlightened educational circles with reference to children who are physically defective?

Is it not true that an effort is being made, here and there, to find a solution of the problem by a radical departure in system? I call your attention, for example, to the celebrated school at Charlottenberg, created for the special treatment of sick and debilitated children. The enterprise was instituted to meet serious conditions. If such children were treated in a sanitarium, they were not educated. If they were educated in schools, they declined and died, or became hopeless invalids. The combination of sanitarium method and school was found largely to solve the problem. A very great percentage is restored to health. Practically all reach normal educational standards. Nine-tenths of them are able to resume school work.

In the light of this illustration, is there any reason why a school curriculum based upon judicious hygiene should not be the prevailing type, instead of the exceptional type? This is a repetition of experience. Methods which are found to be necessary and effective to cure established disease give the key to proper hygiene for those who are still normal. You have seen this illustrated familiarly.

Since the world has discovered the proper treatment for tuberculosis, the natures and habits of innumerable people who are well have been molded to correspond to the principles involved.

I do not suggest that the average school be brought to the extreme type of the special school for the defectives. What I wish to emphasize is that there is neither logic nor justice in recognizing hygienic principles only for those who are ill. Wisdom dictates that the principles of hygiene be determined broadly and practicably and that they be accepted as the initial point in the determination of a school curriculum.

This is not the point at which to attempt to discuss the detail of such a program. The thing to establish is acquiescence in the proposition that sound hygiene is fundamental to any school curriculum.

There are certain defects, however, which it is worth while to touch upon. Perhaps chief of these is the question of fresh air. No problem of the school-room is more difficult to solve under existing conditions. None is more crucial. I cannot take your time to go into that in detail. I must ask you to fill in the things I have left unsaid; but this I wish to say: the child should be educated to an abundance of fresh, cool air, fresher than it is accustomed to, cooler than is perhaps comfortable at first. If involving a process of hardening, why not?

Please believe that I realize the difficulties in this suggestion. Obstruction, complaint, and criticism are inevitable. School architects and school authorities have not crossed the threshold of this proposition. No matter what the difficulties, it is an absolute necessity that this question be met. It will pay many fold, not only in health, but in educational results.

Let us take another question—that of physical activities. I wish to take unequivocally the position that competitive athletics, under the conditions prevailing at present, are a serious bar to general physical development, whether in themselves objectionable depending upon circumstances. At present they usurp and monopolize the field of physical development to the extent of limiting participation to those who have signal ability. They concentrate interest upon competitive success and not at all upon intrinsic physical superiority.

From the primary grade to the end of the college course this criticism is progressively just. Until athletics (so-called) can be put in their proper position of exceptional demonstration functions, they will continue to be a seriously pernicious factor in this educational field.

Every child should be trained physically to its best point, and no influence which stifles interest and cripples effort by establishing impossible standards can be permitted to dominate indefinitely.

Children can not be *forced* into a process of physical development, which shall be continuous, without interest. So far as I can see, this interest can only be supplied by evolving gradually and consistently an ideal of physical perfection to which each shall adhere as tenaciously as to any standard in life.

Let individual achievement displace the desire for conspicuous success. Let emulation take the place of disheartened envy. Let a high standard of school superiority displace the feverish eagerness for the glory of a winning team. Then may we hope for general growth of an ideal which shall guide our physical lives.

In conclusion, let us realize that mental, moral, and physical poise go together. Disciplinary factors, external and internal, involved in self-control are of incalculable value in the growth of character.

Is there any prospect of realizing our legitimate hope for the race struggling with the incubus of civilization, except in the apprehension by teachers of the importance of this matter? Is there any other class of society which can undertake to develop and mobilize the conviction necessary to accomplish this regeneration?

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THE RESPONSIBILITY OF THE MEDICAL PROFESSION

THE title of this talk rather suggests, as I look at it now, a sermon or something in the nature of a homily as to what the medical profession ought to do. I assure you that it is not my intention so much to deliver myself of fixed opinions as to the responsibility of the medical profession, as it is to open a series of questions which have come to my own mind recently in the observation of medical affairs.

I think you will agree with me that, outside of medical ranks, the forces in society, which are at present dealing most earnestly and most intelligently with questions of health, are profoundly impressed with the problems presented by the general health of the community, the health of the public. All organizations, which are working from a philanthropic or sociological standpoint, are convinced that there is no question before the minds of the people of the world to-day more important than the question of health. This is not from a standpoint of philanthropy particularly, but from the standpoint of the State, from the standpoint of conservation of the efficiently active indispensable factors in statehood, the preservation of the health, vitality, and productive capacity on the one hand, and the prevention of dependence and helplessness on the other.

This matter has become so crystallized in the minds of the intelligent leaders of sociologic thought that all of the operations of public officials, and of State interests in this matter, are focusing rapidly in a given direction. Of all the things which these forces in society are endeavoring to encompass, nothing is more important than the subject of industrial disease. It is rather trite to say that the

mortality and disability of a single year, unnecessary and preventable, is greater than that of any war that ever occurred, and yet this is the case year after year, and the forces of public opinion and the machinery of public interest are rapidly coming to recognize that something has to be done to eradicate this wanton, unnecessary destruction of life, efficiency, and independence.

I want to call your attention briefly to the great difference there is, so far as this investigation and effort is concerned, between mortality and morbidity. We have, or can have, very reasonably accurate statistics on mortality; but we have in this country practically no statistics, no data upon morbidity. We know people die and when and of what they die, but have practically no knowledge as to how they got sick, when they got sick, or the relationship of their conditions of life, their work or habitation or whatever it may be, to their sickness.

Now it is with regard to this phase of the matter that I particularly wish to call attention. Unless we can find some way of determining what the morbidity factor is, what amount of sickness is, where it arose, what its relation was to the conditions under which it arose, we are getting nowhere in our treatment of this great question of industrial diseases.

The great question is, how are we going to determine these facts as to morbidity? How are we going to find out who is sick, how he or she got sick, and what the logical relationship is to the conditions of life work and habitation? It is just at that point that it seems to me that the responsibility of the medical profession is vital. Who knows in general the question of sickness? The doctors. Who knows the conditions of the sickness and its incipient stages? The doctors. Who knows the probable relationship to conditions of life, habitation, resources, wages, hours at work, industrial conditions generally? The doctors. Who else knows it? Nobody so directly. The charitable organizations

know it finally in the stage of relief, but the medical profession, taken in detail, knows it and knows all about it, at the beginning and from the beginning on.

This constitutes in my judgment a reason why the medical profession should charge itself with the responsibility for gathering and collating and preserving, and where necessary handing on to proper organizations the facts of morbidity in the people with whom it is in contact. Of course, I am not here to suggest that any one doctor, by keeping any one list of cases and reporting them in any way to anybody, could accomplish much. I am talking now of the duty of the medical profession at large, the duty that seems to me perfectly plain because it is the only factor of any value or efficiency with reference to the question of morbidity. Because it is the sole factor in the situation which is capable of rendering efficient service, I say it is sufficient reason why the medical profession should charge itself with the responsibility.

And yet the question may be asked, as it is asked not only with regard to this question but with regard to innumerable others: "Why should we charge ourselves with this? Are we not over-burdened with work already that we are not paid for? Do we not render hard, unselfish service to the utmost of our strength and ability? Are we not already doing that more than any other element in the community? And I think on the whole the answer is, "Yes, we are." But yet the question remains: "What is our obligation in the matter?"

I think, however, that there is a phase of this matter, and this I speak of with a great deal of hesitation because it is not clear, which is of great importance. I speak with hesitation because I am not quite sure of what I want to say. We all of us know, and there is not a physician within reach of my voice who does not know, without being able exactly to explain, that the whole question of the practice of medicine is undergoing a change; that the whole

future of medicine, as judged by the present practice of medicine, is undergoing a change. There is no one here who does not recognize that there is not as much practice as there used to be, and that it is not accidental, but that it is a phase of some evolutionary process. Now without undertaking to explain that, or going into any detail, I want to call your attention to the fact that the whole medical profession is in a state of transition. The interests of the large masses of people are the interests of the medical profession. The practice of medicine is not a mere practice amongst the aristocrats, the wealthy, or even the well-to-do. The great facts of the practice of medicine are the facts of the masses of people. You know that the interests of the masses of people are becoming more and more recognized as the legitimate interests of the State, the legitimate interests of public officials in one way or another, for reasons which are perfectly obvious. More and more we are coming to see the trend of medical affairs as applied to the mass of people, drawing ever toward officialism or some modification of officialism. Of this I have no considerable doubt. I think everybody's observation must bear this out. Personally I can not look with any great eagerness towards ultra-officialism in the administration of medical affairs. I believe that the modification of officialism would be better, but there can be only such modification as is incident to and consequent upon an awakening sense on the part of the medical profession, of its importance in public health affairs, and consequently its obligation in public health affairs.

In my opinion, the only way that the medical profession is going to save itself from the smothering influence of State intervention, State dominance, if you like, in the broad and deep affairs of medical practice, as related to public health, is by seeing its own importance, its obligation, and hence by its effort to get into such a relationship of indispensable value to the whole subject as to make it the necessary and

logical agent through which the State shall operate in the maintenance and furtherance of its public affairs. It is my conviction that the medical profession as a body should undertake and set for itself tasks related to public health, in the nature of conservation of public health, and of coöperation with State forces. Such tasks will clearly demonstrate, first, the interest of the profession; second, the capacity of the profession to deal with them, which is by no means recognized now; and third, the fact that the profession cannot be dispensed with in this new phase of its vocation.

For all of these reasons which I have hastily sketched, it seems to me that the responsibility of the medical profession to the public as a moral issue, and as a practical issue, is beyond peradventure. And yet I set this forth as a series of very deep convictions and as an expression of wonder that I have as to whether these things are not ripe for action.

Date and occasion of writing unknown.

THE ATTITUDE OF THE MEDICAL PROFESSION REGARDING MEDICAL PRACTICE LAWS

THE majority by far of the members of the medical profession have no concern and no conscious interest in medical practice acts. A small minority have a clamorous desire for restriction as a measure of self-protection. A very small number are engaged in a process of incubating an idea conceived in justice and dedicated to public interest.

The difficulty in making obvious this foundation and the aggressiveness of private interests have thus far operated as obstacles to satisfactory legislation in most of the fields so far attacked. Defect in conception as to what a practice act should be, has been and is the greatest bar to progress. We may safely start with the generalization that there is no conflict between professional interest and public interest. There can be no such clash, and, at any point that such apparent conflict occurs, the interpretation of various rights and privileges involved must be reviewed.

It is only necessary, therefore, to analyze the needs of the public in order to discover the elements essential in restrictive or corrective legislation, employing the interests of the medical profession only as a sidelight in which to criticise conceptions of public welfare. Although this proposition departs from much of the prevailing expression of opinion upon this matter, I believe that it is reasonable to predict that the medical profession will accept the premises.

Physicians are not selfish or narrow in mind as a class. In practice, local conditions and peculiar circumstances introduce difficulty in professional relations, but at bottom the ethical solution of a problem is acceptable to them.

On the side of the public, however, difficulties are more complex. We are looked upon with suspicion in our efforts at legislation. It is human to question with some skepticism legislation urged by a class looking to the regulation and perhaps exclusion of a part of a class. This must be met and overcome in the course of this agitation. It can not be avoided. No one is as well qualified as the physician to indicate the public need in its medical relations. The burden of proof, however, as to his wisdom and altruism, is not small and his sagacity must be his stronghold. Recognizing these facts, the organizers of this movement are reaching freely into the community and asking coöperation with agencies which have standing and authority in legal and sociologic construction.

The first step, beyond question, is education of ourselves and of our coöperating colleagues in the other professions. With a well defined idea held by a coherent, aggressive body of public spirited men, some solution that is fair and effective will not be far off. Have we as yet formulated that idea? Let us see. Public health is the paramount issue in public affairs. How generally is this recognized? Very imperfectly, yet the growth of that belief in a few years is clearly an index of world wide progress toward that conclusion. As health is for the individual by far the most important consideration in life, so for the State is it the most vital economic problem conceivable.

The entire territory involved in this public warfare, covering sanitary, hygienic, and individual medical questions, is within the necessary purview of medical science.

Broader principles and possibilities imply deeper obligations, and we find ourselves facing enormous tasks. Has the State the right to direct the forces necessary to effective application of scientific health measures? Beyond question, yes. Why and how, and with what limitations, you have heard clearly discussed to-day. The line of definition between public health functions and private practice becomes

rapidly more obscure. These territories overlap and coincide to a degree that makes any distinction temporary and provisional, and perhaps valueless as a feature of legal action. The health of the people is the only logical consideration and all its aspects are legitimate objects of attention.

Assuming that the State will establish its authority in matters of public health, the interesting point for us is the relation between public health and individual health. At what point does the public aspect of the question disappear in private right? Here is the battle ground. On the one side are alligned private interests, commercialism, corruption, various conceptions of individual liberty, and all varieties of economic non-interference theories. Upon the other, may be found clear thinking, determined, practical guardians of public weal upon the platform of moral obligation.

What are the obvious needs of to-day? First, a large body of trained health officers. Second, an organized body of physicians for the equipment of institutions of relief. Third, coöperation in the application of resources of medical science. Fourth, maximum competency in the mass of physicians who treat people of limited means. Fifth, some standardization of medical practice whereby it may be apparent to the public which physicians are qualified and which not qualified under the terms of such standards.

It is obvious under this proposition that medical standards in education must continue to advance. To those familiar with all the facts, it is a matter of regret, and to those familiar with only part of the facts, incomprehensible, that medical education in this country has not adopted this question of prime importance, the education of health officers. This is not the time to discuss that subject, but I can not refrain from stating that the main reason why this is so is an astonishing lack of comprehension, on the part of medical educators, of the significance and importance of public health

administration. Either schools must accept their legitimate burden, or the State must undertake independent educational work.

The organization of a dispensary or hospital staff upon a basis of efficient coöperation is clearly a medical function, and so important that, if it is not done, any medical practice act will be, to a large extent, nullified. Elevation of the rank and file of physicians in point of fundamental education and practical efficiency clearly rests with the medical profession, and yet as a practical feature it is found to go only *pari passu* with public demand.

Public demand as to the competency of medical practitioners is not as unequivocal as one would expect. It is an interesting psychological question why the first reaction of the public toward medical practice acts should be one of opposition. I think experience rather shows this to be true. In making this assertion one must qualify by saying that only a part of the public is thrown into such opposition. Aside from the selfish and pecuniary interests which will always furnish a fixed opposition, there is a large mass in the community which thinks more or less about public matters. There is a much larger mass which thinks not at all and is tremendously the prey of bad practice and intensely the object of solicitude on the part of the government. But, effective opposition comes from the thinking mass of people and the reason for it is comparatively simple. Medical relations are essentially personal, intimate, and temperamental. The more intelligent people are, the more this is true. There is an instinctive and more or less legitimate repugnance on the part of most people to having to be even indirectly dictated to in such relationships.

The most effective argument against all efforts at legislation has been and will continue to be an assertion of the right to employ for one's physician whomever one chooses. Under the existing conditions of society this is sound, and no medical practice act which fails to recognize this

fundamental principle, in my judgment, can be effective.

The conclusion from this proposition is obvious. The State through legislation can only effect the elements of choice by some form of definition which shall make possible at once fair, safe, and intelligent choosing. The obvious conflict that there is between public interest and individual right at certain points is quite another question. Those are matters of construction as to police power which lie quite outside the domain of medical practice acts. The proposition becomes simple to state and difficult to answer:

Shall the State under its forms of selection permit practice, or shall it simply illuminate practice?

Shall the State designate who may practice, or shall it define the qualifications of those who are in practice?

Shall it license or shall it accredit?

These are the two lines of procedure essentially different in principle and operation.

The choice between these alternatives relates necessarily to the probable effect upon public interest and particularly the items which I have before mentioned, namely, health officials, dispensary organization, professional coöperation, general improvement in medical education, and the fixing of a standard which shall, through education, come to be recognized as a safe guide to the public in the selection of medical advisers.

Concerning the first three, the medical schools and the medical profession will be able effectively to determine a proper standard and process. These are essentially sociologic questions, but to be worked out probably by a combination between social service and medical officials to a satisfactory issue. As to medical education and a public standard the case is different.

There is no doubt that the present plan generally operative of licensing physicians upon State examination has had a marked influence in raising the standard of requirements in medical instruction, generally, in this country. It has

had by no means as much influence as it was hoped nor as much as is usually ascribed to it.

The improvement in standards and requirements in medical schools in recent years has been particularly in those schools which in the nature of things would have improved under growing conceptions and higher ideals. All of the leading colleges, as a mere matter of evolution of medical thought, would have reached their present status without State requirements. Certain of the colleges of less standing doubtless have been influenced by the necessity of putting their graduates into a safe position respecting State examination, but the mass of inferior and objectionable institutions, which are grinding out graduates by one process or another, whose graduates are passing State examinations of the character now in vogue with facility, are neither influenced nor embarrassed by the present system.

This would, of course, not be true if State examinations were more rational and real, but as long as a State examination is of such a character that it can be passed by mere book knowledge, no reflex upon college curricula, which are essentially spurious and a pretense, is likely to occur. Nothing can be more vicious than an examination of purely formal character coupled with the present standard of eligibility.

To declare any candidate eligible who has a diploma from a "recognized" medical school, to recognize medical schools upon the basis of fictitious presentation and fraudulent method, and then to complete the test by an examination which any man with a good memory and no medical training can easily pass, is not only futile but in the highest degree iniquitous.

In order to correct the vices of such a system there must be absolute reform, first in the definition of "good standing" as established by the State authority, second, in the character of the examinations which shall be held to determine the qualification of the candidate. Under present

conditions neither of these reforms can come to pass for a great while. The political power of interested factors in the problem is sufficient to keep the approved list of colleges filled with fraudulent and inefficient institutions. The same influences operate and will continue to operate in the constitution of examining boards, with the result that such boards, with the best of intentions, if that were conceivable, will be utterly incompetent to conduct proper examinations.

Personally, I see no hope in the immediate future for any real transformation in type or in spirit under the plan of medical license. The necessity for license is not sufficiently obvious, the objections to it are too cogent, the sources of opposition too widespread, and methods of evasion too simple, to offer considerable promise of thoroughly effective operation.

Under that proposition utterly indefensible standards of recognition as to colleges will certainly prevail. While failure to pass a State examination involves prohibiting practice, examinations will continue to be misleading and ineffective. The result of our present plan of operations is, that we fully accredit and foist upon the public an army of practitioners utterly incompetent, with the absolute and complete stamp of approval on the part of the State. The reflex of this condition upon social interests is bad. We may secure from the ranks of physicians so endorsed by the State, our health officers, experts, administrative officers, to say nothing of the rank and file of general practitioners.

For the most part these objections can be obviated under another plan. If it were possible to eliminate from consideration the protests of individuals on the plea of injustice, progress could be made. Fundamentally, in a democracy it is more ethical to lean than to coerce, and the plan which appeals to me, and to many of the profession who are concerned in this matter, is the plan of accrediting or registering upon a basis of high scientific standard. This plan has the merit of a stronger practical usefulness and a deeper

ethical basis. It involves simply the creation by the State of a tribunal which shall earnestly and honestly investigate and pass upon the qualifications of all men who wish to be so accredited.

Why is not this plan open to all the difficulties and objections of the plan of licensing?

First, because no individual rights are in question and the factor of public interest stands out clearly defined and uncomplicated. Second, because an examination based upon that principle would be a constant and increasing stimulus to medical schools toward real education and away from formal education. Third, it would be comparatively easy to decree that public health administrators of all degree could come only from such an accredited list. Fourth, it is hoped, and I believe with reason, that the public would rapidly be educated to the significance of such registration or the lack of it.

All exercise of police power is a subject for apology essentially related to an exigency and theoretically temporary and provisional. The object of licensing is not primarily to restrict the individuals who practice, but to offset the ignorance of the public employing the physicians. Education of the public as to a basis of selection is the real point to be desired, rather than undue restriction. The more clearly the elements of qualification and competency can be set forth in this classification, the greater will be the influence upon the minds of the public.

Of course, the objection to the plan is that it will leave in practice a very large number of incompetent physicians. Those who are looking into this are disposed to think that the number will be no greater under that plan than under the present plan. With all its drawbacks, however, it will have the merit of furnishing a reliable list of medical men whose qualifications have been in fact determined.

This can not be said of any list now in existence, determined by any governmental process.

Several subordinate questions, however, arise: First, what shall be the distinction whereby the difference between an accredited man and a non-accredited man may become obvious and easily recognized? Second, shall there be a distinction between the accredited class and others, with reference to their standing in court, for example? Third, shall all who wish to go into the practice of medicine submit to a State examination, the successful ones being accredited and the non-successful ones being non-accredited, but still allowed to practice? Fourth, if this examination shall not be compulsory upon all candidates, but voluntary for accrediting, shall a standard be adopted as to the quality of the medical school issuing the diploma in question?

These are questions of great importance in formulating a plan for practical application. They are not at all important in the consideration of the general principles involved. If one were to approach this problem anew, without practical experience, it would be difficult to say which plan would offer the best results. In fact, the history of medical legislation thus far indicates that *a priori* judgment leads to the adoption of restrictive or licensing methods. It is perhaps as a reaction due to the disappointing results in medical legislation, that one's mind turns again to the underlying principles. In the end the moral quality in legislation determines its permanent effectiveness.

All things considered, I believe that there is a deeper ethical note in public movements which encourage individual judgment and choice than in those which introduce more or less mandatory influence. Upon a foundation of that sort, the effort of the State to make clear the conditions of choice for its citizens, becomes its highest and presumably its most influential service.

The exigencies of civic life can be met by the exercise of police power, fluctuating with the spirit of the time. The early history of reform movements may be of necessity marked by arbitrary and restrictive measures. As a feature

of permanent and well constructed society, however, that custom which rests upon widespread intelligence is the only custom which can be expected to endure.

The merits of the suggestion which I make are simply three:

1. The highest degree of individual freedom.
2. The highest standard of classification as a guide to public judgment.
3. Limitation of the stamp of approval or employment by the State to individuals whose qualifications have been actually determined.

I revert now to the subject of this paper, "The Attitude of the Medical Profession Regarding Medical Practice Laws." Does the matter as I have stated it represent the personal attitude of the profession? I think I may safely say that it does not. Ought the medical profession to assume this attitude in the matter? It seems to me that it ought.

Again I repeat the principle which seems to me to underlie medical practice legislation from the standpoint of the medical profession. I believe there is but one ground upon which to justify interest and agitation in that matter on the part of the profession. That ground is protection of public interest. If the principle here set forth is sound, and the proposition founded upon it can be regarded as finally and deeply contributing to public welfare in medical affairs, the rights and purposes of the medical profession are adequately secured. How much of an effort will be required to eliminate the idea of self-protection and self-interest, one can not know. How long it will take to swing away from the simple and obvious plan of restriction through license, to the broader and more indirect plan of influencing and educating by a process of accrediting, no one can tell. The longer the time in prospect necessary to effect this change in sentiment, the sooner we should be at it. My own feeling about it is distinctly in favor of the plan which I have superficially sketched.

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THE TOXIN OF FATIGUE

WE are told, and we have come to think, that the chief reason why reforms in social affairs, be they political or other, are spasmodic and evanescent, lies in the character of the agencies which inaugurate movements for correction of abuses. The idea prevails that the forces of selfishness are always alert, aggressive, and organized, and the forces of reform are unorganized, and temporary in their purpose. This is probably very true. There are other elements, however, of great importance in determining the lack of consistent and stable progress characteristic of social reforms.

As a rule, foundations of reform movements are not broad enough. Frequently they are not sound enough. No movement involving the whole people goes far that does not reckon accurately with human nature. No movement can stand which has not unfailing truth, unequivocal fact, as its foundation.

In order to have success at all there must be satisfied that human need which we may call, without reflection or reproach, sentimental. In order to have permanence and ultimate respect there must be met the requirements of intellectual approval. Whatever is done ultimately harmonizes and utilizes both of these factors in human affairs.

It is very obvious that the trend of social development is progressive. It appears to be true that efforts at reform and even radical reconstruction are accorded a measure of respect and coöperation far beyond what a few years ago would have been possible. The reason for this, to a considerable extent, lies in the sagacity of the builders. They have come to see that unquestionable fact is the corner stone of any structure. No great movement is now

undertaken by intelligent persons without systematic effort to determine the facts relating to the subject. Rational as this is, it must be admitted that as a distinct and predominating feature of social movements it is comparatively new.

The gathering of data of critical accuracy is for the most part preliminary work. It is the work of individuals, of small groups, of unseen hands, actuated and inspired by clear social vision. There remains always to be accomplished organization for the purpose of making effective the moral value which such results embody. Here opens up before us all the fine art of propaganda, the unlimited field of the social worker.

As I have intimated, at this point there comes in a grave danger—the danger that popular passion shall be substituted for intelligent motive and utilized to extravagant ends. The effective checks upon this tendency are clearly defined data coupled with the determination that fancy shall be made to square with fact.

Scientific accuracy is greatly to be desired in all discussions subject to the illumination of science. Accurate determination of underlying facts is obligatory upon those who undertake constructive movements. The fullest array of information having definite scientific value and bearing upon such questions as social reform is in the utmost degree desirable. It must be recognized, however, that there are matters of human interest and enormous social importance which are only partially open to scientific interpretation, and with regard to which methods of adjustment must be found other than purely scientific.

Considerable interest has been evoked, and some measure of encouragement expressed, by reason of the fact that there has been rather conclusively determined through laboratory researches the fact that fatigue has a certain definiteness of nature and degree hitherto not fully realized.

It has been conceived that if fatigue could be made a

ponderable quantity, accurately measured and accounted for, it would be a long step toward meeting the problems related to fatigue.

There have been advanced, consequently, valuable propositions dealing with the physiologic aspects of fatigue. For a great while it has been believed that living machinery showed a tendency to flag in its operations, not because of exhaustion of certain vital principles, but because of an accumulation of the products of work. In other words, not that the machinery was exhausted, but that it was choked.

There is a great deal of truth in this view. Physiology is an extraordinarily complicated subject and our knowledge of it in its ultimate facts is meager. There are certain broad principles, however, which are not only obvious, but which stand the test of all physiologic investigation that we have.

A machine which is at the same time building up and tearing down must have, if it is to maintain its integrity, a very delicate mechanism of balance which insures not only processes of construction and destruction but processes of introduction of usable materials and elimination of used materials. It may perhaps not be generally understood that a living organism can exist many times longer without nourishment than it can without elimination. Any living organism will die promptly if the waste products from its life processes accumulate; in other words, if there is non-elimination. So it is undoubtedly true that an organism can be choked by the products of its own life activities.

It is well to remember that these vital processes in the human animal are distinctly of two kinds. All of the things which we do in our conscious activity—work, play, and thought—are matters of voluntary effort. They are things of which we are conscious, over which we have control. They constitute what we have in mind when we speak of our activities. When we consider labor we are thinking

solely of a voluntary expenditure of energy, but on the other side of this balance lie all those processes which are involuntary, unconscious, unrecognized; they are the nutritive processes, the so-called vegetative processes, and are things utterly beyond our control.

In dealing, then, with any physiologic problem, such as the problem of fatigue, we are really dealing with factors over which we have various degrees of control. Normally we can measure, increase, or decrease, our voluntary efforts. Life is made up of the interplay of voluntary efforts, but over our vegetative process we have neither control nor have we immediate consciousness of the processes. Under normal conditions vegetative life is automatic, adequate, and with a large range of accommodation to physiologic demands. Under abnormal conditions, these factors markedly diminish so that the processes of nutrition, elimination, and repair become variously diminished and open to all manner of disturbances which we are prone to regard as disease.

Experience shows and experiment verifies that not only is vegetative life necessarily taxed with sustaining voluntary life, but voluntary life can through excess or perversion not only throw more work upon vegetative life than it can accomplish, but also in this very process distinctly limit the work that vegetative functions can perform.

It is very easy to see, therefore, that under given conditions labor can be pushed to a point beyond that at which vegetative life can meet it. If in addition to that fact we admit that this excessive demand, long continued, greatly limits vegetative power, we can easily conceive a status in which the products of work, which we call "waste products," are more than the normal mechanism can dispose of. Beyond a certain point the demand for elimination and the effort to eliminate cease to go hand in hand. From that time on, though the demand be never so great, the response becomes progressively less.

Out of that combination of facts can arise any degree of physiologic poisoning which we have come to call "toxic," and there is no doubt that upon these simple lines there is a distinct body poisoning in accordance with these principles.

There is reason, however, to believe that the products of labor, particularly muscular labor, are not entirely due to accumulated waste. Laboratory research, verified by many competent observers, indicates that there is created in the process of muscular work, and perhaps in the process of mere mental and nervous work, substances of a nature distinctly poisonous, which have been designated as "toxic," the so-called "toxin of fatigue." From a physiologic point of view this is very important. The bearing of it upon life processes, cellular activity, ultimate chemistry, nervous control, and organic breakdown, is very great, but it is after all distinctly a physiologic question, at the moment *sub judice*, and for practical purposes not material to our hand, though as a factor in the development of general intelligence upon the subject of work it has great value.

Scientific determination always is in the rear. Human experience has blocked out and worked out the field of human interests long before fundamental reasons have been determined. Scientific demonstration comes afterward, explaining, illuminating, correcting, stimulating, but rarely pointing the way. So we shall find in the discussion of our own problem that scientific fact here and there developing operates to strengthen the belief in that which is sound, and to correct the weakness in that which is unsound, but by no possibility now can it be substituted for the lessons of experience in dealing with this most vital of human problems.

This should be no disappointment to the lovers of scientific demonstration and accuracy. It is true in all directions. The study of tuberculosis received its greatest impetus from the discovery of the micro-organism which is the immediate cause of tuberculosis, but the problem of

dealing with tuberculosis has gone on under this stimulus to the point of enormous efficiency with scarcely any assistance from scientific knowledge of this organism. Aside from the fact that quarantine is simpler and more effective because of our knowledge, the tuberculosis question could stand on the product of experience, irrespective of what we know of the germ, or its damaging effects. Although this may not always be true of the relationship between scientific discovery and common experience, it is in most directions true now, and the world cannot wait for any other relationship to be established.

We know enough as to the physiologic bearings of fatigue to enable us to deal wisely and thoroughly with the subject. Let the search for truth in the laboratory go on, a stimulus to critical study, a help to hygienic living and a corrective to false physiology, but the wear and tear of the worker must speak for itself in terms of common experience.

What is this common experience with which our views of fatigue must square? As one views the intricate activities of civilized life, it seems as though it were almost too complex to discuss. For one living according to the most complicated type to-day, the elements of fatigue seem so interwoven as to be inextricable. The combination of mental and physical, ambition and worry, mal-nutrition and want, demoralization and degeneracy makes composite factors difficult to analyze. We are far from having attained such physiologic and psychologic knowledge as entitles us to final opinions upon many of these questions. There are, however, obvious lines upon which to proceed, and the more limited the field of inquiry the fewer main paths there are to traverse in a preliminary study.

I desire to keep clear of theory involving the occult in physiology or psychology. I desire to pass by every panacea offered in solution of our human difficulties.

The purpose of this discussion is to further the establishment of fatigue as a factor in standardizing the number

and arrangement of hours of labor. It is not purely merciful or perhaps primarily merciful, but fundamentally an attempt to economize the powers of our working population. It is desirable, therefore, that we clarify so far as we may our notion of fatigue and separate it into its various aspects.

Fatigue is a comprehensive term and not particularly valuable as related to our purpose. It is a mistake to consider that overwork and fatigue necessarily coincide. It is a mistake to believe that sufficiently clear evidences of fatigue arise directly in connection with unduly strenuous labor. The elements entering into the question of labor as related to endurance are complex. For example, much of the heaviest labor from the standpoint of physical exertion is not associated habitually with an immediate sense of exhaustion, even though its ultimate results be very destructive. Heavier trades, such as iron-workers, blacksmiths, and many others, and even the activities of certain forms of athletics, are not characterized by any marked fatigue, and yet they are beyond question extremely destructive to the human organism. The great increase in strength, bulk, activity, and perhaps vitality, incident to these strenuous occupations, not only does not mitigate, but on the contrary rather accelerates destructive organic changes and serves to deprive them of the protective and conservative influence of fatigue.

The problem presented hereby is one of great practical difficulty. Picture the difficulty of persuading a blacksmith, who is able to do his full day's work without conscious fatigue, that his whole method of labor should be modified with respect to a deterioration far in the future. Yet there is not the least doubt that if the logical course of standardization is pursued, just such a question as that must arise. The immediate questions before us will be simpler because more obvious.

What do we mean by fatigue? I think it is a mistake

to consider the various manifestations of fatigue as merely matters of degree. The wear and tear upon the organism comes in so many ways and through such various phases that it is hardly comprehensible if we simply treat it as a gradation. We assume that an individual who is tired will recuperate with rest. Under the simplest conditions this is true. It is not conceivable that there is a degree of fatigue which has no structural relation. The fact that our means of observation are not sufficient to show us what the structural change is, merely argues our limitation. It is to assume that even the simplest fatigue has a change in cellular structure which under ordinary circumstances rapidly returns to the normal. It is undoubtedly true that conditions of prolonged tax with exhaustion produce structural cellular change which does not easily or rapidly return to the normal. Between these extremes there are doubtless all degrees, but our practical questions can not rest upon a simple schematic basis like that. We have got to weigh and measure fatigue as related to the specific conditions under which it occurs. The problem is individual in each instance. The character of work, age, sex, vitality, and material conditions of the worker must be weighed together.

It is not a mechanical problem, it is not a mere physical problem. It is distinctly a human problem in which the interrelation of physical, mental, and industrial needs must be intelligently interpreted.

Doubtless this interpretation will proceed irregularly and unsymmetrically along the lines of least resistance. We have seen this clearly foreshadowed in the movement against child labor, followed markedly by the movement to limit the labors of women. These in turn will be succeeded by movements arising as the necessity for them becomes more obvious. Nevertheless, no single movement along these lines can be regarded as final, nor even very useful except as it establishes beyond question recognition

of the principle that labor is a human function and intended to elevate and not to degrade the race.

Every detail that can be worked out in building up an industrial system that squares with this ethical conception will be of value and immutable, but far in the distance lies that point at which all of these ideas will be gathered together, correlated, and made to serve the real interests of humanity. In the meantime we must strive point by point to clarify, demonstrate, and make effective, ideas looking to this end.

Long ago, students of industrial conditions came to recognize as a type the individual who is "spent" by reason of undue labor before maturity. We have hardly yet grasped the idea that the same factors showing acutely in the results upon the immature, operate somewhat less manifestly in all laborers.

The two factors, specialization and economy of production, are bringing us to an industrial crisis which will have to be reckoned with. Specialization means beyond doubt industrial effectiveness, but its counterbalance is monotony. Economy of production means especially economy of time, but its counterbalance is "speeding up." Out of these two factors arise the great offenses against human endurance and community welfare.

Both of these factors must be interpreted in the light of psychologic fact. The ultra-monotonous labor, by reason of its lack of conscious constructive quality, fails utterly to introduce into the personal equation of the laborer the compensating factor of intelligent interest. The "speeding up" process particularly related to this work, must be weighed in the light of its mental strain. Of the two, beyond doubt the "speeding up" process is the more destructive as a mere physical proposition, but as related to individual development or happiness or inspiration it is not so clear that monotony is not the worse.

It is quite possible for either of these lines to be pursued

without any very conscious fatigue until a great damage has been done. The elements entering into personal attitude toward work are so complex that one can scarcely forecast in particular how things will work out, but wide observation shows, as a general proposition, that in many lines of industry there is an enormous sacrifice of individuals upon this altar of economical production.

It is clear, then, that any questions of time as a measure of a day's labor must be established in relation to the character of the labor.

Fatigue is viciously progressive. When it has passed a given point there are at least three general considerations: first, the actual structural change due to over-tax and expenditure; second, the impairment of nutritive processes distinctly limiting assimilation and repair; third, the accumulation of poisonous products incident to the operation of the two preceding. Taken all together, we have an overwhelming incubus which no organism can long survive.

Are we going to meet this situation by the enactment of child labor laws? We are not. Are we going to meet it by the enactment of laws limiting the hours of work of women? We are not. How then are we likely to progress? By the creation of a new industrial conception. By the establishment of the principle that human industry is only beneficent in so far as it evokes and utilizes the largest individual powers for the longest time. Any conception which makes material production paramount to the essential interest of the units entering into that production can only aggravate our present condition and accelerate an inevitable disaster.

The chief factor entering into the determination of this problem is the factor of endurance. The subordinate factors are happiness and harmony, but fatigue, manifest or hidden, is the essence of this question.

You will gather from this very cursory discussion my reservations upon the topic of this article. Not only is our

present knowledge, chemical and biologic, as to the "toxin of fatigue" insufficient to furnish us any practical data, but further, it is exceedingly ill-advised to attempt to establish working formulæ upon any foundation so ill-secured. In so far as progress in industrial matters is to be furthered by legislative action, what is presented must carry conviction to the ordinary intelligent mind. Propaganda based upon hypothesis, half-truth, or partially determined scientific knowledge, are dangerous. The laboratory developments upon this subject are stimulating and helpful. They can not at present be used either effectively or with safety in a practical effort to correct the abuses of our social life.

When I discredit in this way laboratory results, I do not at all discredit the laboratory idea. It is beyond all things the idea which we most need at this moment to establish a foundation for industrial reform. It cannot, however, be the chemical laboratory or the physiologic laboratory, except as a minor adjunct. Our laboratory is the human laboratory, the field of operation, the individuals who make up our industrial life—it is the shop, the office, the factory, and the mine. What is needed above all things as bearing upon this question is comprehensive and profound study of the conditions of labor, particularly with reference to the question of human endurance. This means an accurate, analytical study of work as it is done where it is done, freely regarding all of the collateral conditions under which workers live. With this modification I am convinced that laboratory work as a foundation for industrial reform, one phase of which is the standardization of hours of labor, is fundamental.

Fatigue must be approached from the standpoint of its results, obvious and demonstrable to the intelligent mind. The chemistry of fatigue must be a side issue. Given any such exhaustive research into the ultimate facts of laboring conditions, we shall have acquired a fund of knowledge upon which can safely be built an elaborate system of

industrial hygiene. If, however, we had at hand now the information necessary to a general conscientious attack upon this problem, we would still be far from great achievement.

The second factor, which I have before mentioned, must be secured. Popular belief in the principle and doctrine that we stand for is a necessary antecedent condition. It is not likely that a great change in the conception of industrial morality can take place abruptly. It is likely that a long series of experiments, advances, retreats, and half-victories will mark the progress of the next few years.

It is necessary, however, that those agencies in society assuming responsibility for these movements, and arraying public influence in furtherance of them, should proceed consciously, unerringly, and without essential compromise toward the establishment of an ethical conception of labor and its relation to life. Properly combined with, and reinforced by a mass of honestly determined facts, this phase of the matter can not be discredited by being called sentimental.

Unless backed and fortified by clearly determined facts, a sentimental campaign will fail, but all the research and determination of fact conceivable will fall far short of its achievement, except as it is vitalized and promulgated by the deepest moral sentiment of the people.

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THE MANAGEMENT OF DEFECTIVE CHILDREN

HOWEVER great the difficulty of establishing principles upon which the defectives of society shall be managed, a more difficult and more important question is, What shall be the attitude of society in general toward the defective?

Civilization has definitely planted itself upon the ground of securing and maintaining the survival of the unfit, recognizing that the term "unfit" has merely a biologic value and neither a sociological or ethical value.

If it could be reasoned from this discussion that the right to procreate was inherent in the right to exist, there would be little question that no separation could exist between a biologic and sociologic value. It seems inevitable that we shall make this definition more sharp rather than less, and that as we progress we shall more rigidly protect and cherish the individual during his life, and more resolutely and definitely determine that this influence shall cease with his life. The question of care of defectives must turn largely upon this issue.

If society is to permit degeneration to proceed unrestrained and free-handed, it has no excuse at all for this struggle to make safe or comfortable or prolonged the lives of its weak and unfortunate.

The problem of procreation of defectives is still to be solved. The problem of the care of defectives is upon us. Assuming that the future will see a solution of the former problem and that it will be consistent with the principle stated, it leaves us to decide how best to handle the defective with reference to his present existence.

Society is still unfolding its conception of custodial care, and, great as the advance has been since the days of "Bedlam," much greater will be the advance toward rational and

humane administration. Any careful analysis on the basis of the normal and departure from the normal shows the inherent difficulty of determining what shall be considered defective. Practically, under our present conceptions, those who are sufficiently defective to need custodial care are reasonably accurately determined by conditions of economic dependence. But experience shows clearly enough that test to be insufficient. On the one hand, much assistance that could be rendered looking to lessening of defectives is omitted, and on the other, individuals are given full freedom and prerogative in society, who should be, for the sake of future generations, somewhat restricted.

The whole situation calls for a more far-seeing policy, and amongst the factors which are necessary to handling the problem are to be counted the institutions of various kinds which directly or indirectly deal with these individuals.

The question to which I address myself here is limited. Shall various institutions be definitely and solely devoted to the welfare of defectives or shall the management and culture of such unfortunates be a function of institutions more generally administered?

The question proposed was further qualified by specifying defectives having "dangerous moral tendencies." It must be apparent that such qualifying is neither definite nor significant. Broadly considered no one can define what are strictly dangerous moral tendencies, and experience shows invariably that all defectives are more or less liable to such developments. Practically, the question must remain as to the proper care of defectives, not only with reference to their developed moral obliquities, but with regard to the prevention of these developments. The best policy with respect to that aspect of the matter must be determined for the most part by the relation which the policy bears to prevention rather than to mere restriction.

There are at least two questions involved herein: First, which method will produce the best results for the

individual? Second, which is best calculated to meet the necessities of society, especially in respect to the limitation and prevention of defectives?

This subject offers no exception to the rule that effective dealing with human development varies directly as the intimacy of knowledge of the individual. If the persons in charge of defectives in this troublesome class can better and more intimately know the individual presentation upon one plan or the other, a decision as to effectiveness is at that point measurably determined.

It is questionable whether dangerous tendencies are fundamental moral defects. In competent hands they can frequently be eliminated. In incompetent hands they can almost always be developed. These are far more matters of accident, opportunity, and imitation than of primarily moral perversion. This in turn emphasizes the value of individual acquaintance and insight, and again the question recurs, On what plan can these best be secured?

Administration, such as is here contemplated, is essentially educational. All educators agree that the essence of successful education is a sufficiently small unit. For that reason, if for no other, any plan which differentiates a class of individuals upon the ground of specific characters is to be favored.

To any extent that defectives can be grouped rationally, a method of dealing with the group of administrative forces will be developed. Only upon wise classification can the highest level of efficiency be reached, so far as concerns the individuals in question.

This phase of the subject requires no argument. Practically, the question becomes, How much can society afford to expend in an effort to secure enlightened and adequate management of these affairs of the community? The answer to this latter query will turn to a considerable extent upon the prospective future of the individual as to his social relation. If he is to be permanently in custody and under

real surveillance, the State has less at stake in the development of his character than if he is free.

Inasmuch as this factor is very elastic and the prospects in any given case more or less indeterminable, safety lies in the assumption of possible liberty for the patient. Upon that assumption the State can ill afford to spare any pains of an educative and preventive character.

My conclusion as to this is that the State should make an especial effort to promote the proper development of these individuals and that there is no question that its accomplishment is more possible under a plan of special institutions.

The suggestion preceding, that bad moral trend is more the result of opportunity and imitation than innate, gives the key to the discussion, namely, Which plan is best calculated to meet the necessities of society, especially in respect to the limitation and prevention of defectives?

Experience shows that bad habits, physical or mental, are intensely contagious. The danger from vicious individuals is by no means confined to groups of the defective. That these dangers are more acute amongst defectives is no doubt true. So far, then, as concerns limitation of vicious developments in those in custody, there can be no doubt of the value of segregation.

The lesson, which is taught by experience in schools of perfectly normal individuals, ought to be sufficient. Once a vicious streak is implanted in a population, shifting and more or less serial in its character, eradication is so difficult as to be almost impossible, except by absolute separation of the old from the new.

In conditions where the authority exists to transplant summarily and arbitrarily from one community to another, it ought to be possible to limit this insidious contagion. There is an added advantage in such transfer to another institution. To a considerable extent it relieves an administration of the necessity for classification of inmates on the

basis of conduct or upon a punitive basis. The less those conceptions enter into the management of the defective, the easier the path toward mental reconstruction.

In so far as defectiveness is mere deficiency it may be very simple and essentially of quantitative value, but perversion is qualitative and usually very complex. At a glance it is not at all easy to draw this distinction.

Administrative functions are more and more being complicated by the recognition of a need for this definition. Lack of discrimination herein is so patent and grievous that only the fact of underlying ignorance can save placing the stigma of "scandalous" upon the situation. The sick, the poor, the criminal, the insane, are all subject to the accidental grouping instituted by traditional and prejudiced administration of social corrections. That such definitions in truth are not hard and fast, intelligent students are coming to believe. The more reason, then, that the boundaries be elastic, the mass mobile, in order that the individuals may be adjusted to their needs, as they appear. Accuracy of definition is not sharpness or rigidity. It lies in the comprehension of the individual observance and its needs.

The important consideration in this question is, how to escape from the hitherto almost universal error of superficial classification. Is a person vicious because his act is vicious? If so, is it intrinsic and permanent obliquity, or is it amenable to treatment? If a vicious act does not imply essential viciousness, what factors of extenuation are there, and how are these to be interpreted for more just classification?

These are not academic questions. They are propositions that arise as scientific study of degeneracy, defectiveness, and delinquency proceeds. Interpretation of individuals of a class will be a necessary step before final definition of classes can be established. Provisional disposition of abnormal types is perhaps justified by social and economic exigency, but it is not the less provisional

and inadequate. Social science exists for the purpose of replacing provisional method with scientific method, and the reproach to civilization will lie in undue delay herein.

Profound study of the normal is beyond question fundamental to social progress. Thorough analysis of the pathologic is as indispensable to social stability. As in all science, the normal is to be comprehended through deep scrutiny of the abnormal. Differing from other science, experimental pathology cannot be invoked in social science, but abstract pathology and experimental therapeutics become the agencies of progress.

The world could well afford to dispense with its defectives if a single dispensation would accomplish relief. But inasmuch as the stream of defectives is constantly arising from sources not suspected, and being augmented by causes intrinsic to human experience, the world cannot afford to ignore its defectives as a field of study and as material with which to work toward corrective influences. Every almshouse, every prison, every insane asylum offers opportunity for study so valuable that it is almost incredible that society has thus gone on oblivious of the waste.

That such institutions are essentially custodial and decent is far from being the tribute to our advancement that we would like to feel. The impulse beneath our present method is humane, but in no sense broadly humanitarian. Association of study with relief is distinctive of modern sociologic thought, and in that light our dependent class assumes a new and crucial importance.

Nothing is more difficult to teach than a real appreciation of the fact that the value of thorough and scientific dealing with defectives is in its reflex upon society. The public views with various degrees of sympathy the distressing results. It is intensely concerned, for one reason or another, with *what* happened. It has scarcely turned an ear of passing interest to *how* it happened, and yet the latter is the point of paramount importance. It is evident,

therefore, that social problems must find their solution in operations harmonious with the principles of human progress. The principle is the important thing to discern. Methods easily enough can be made to conform.

At this stage, it seems beyond question that research is the key to our present need. Therefore, quite beyond the fact of administrative facility suggested as a reason for segregation of vicious defectives, I urge consideration more profound.

For purposes of study let us have the smallest logical groups, in the most plastic relation to the class, with the highest obtainable ability and permanence in administrative officers.

Upon this foundation the query set as a text for this discussion is definitely answered in the affirmative. Let there be segregation of vicious defectives under specialists. Let this be with a view, first, to eliminate mental and moral contagion; second, to permit transfer, back and forth, as classification becomes accurate; third, to furnish a laboratory of specific study, independent of mass embarrassments, as a factor of real value to society.

In no other way can the curse of institutionalism be avoided. The establishment of a plastic character in the institution of a large defective population, whereby adjustment of classification according to individual needs becomes not only possible but necessary, will at once create a demand for the highest intelligence in administration. Under this plan, individuals who present specific characters demanding interpretation become an eager quest.

The establishment of adequate facilities for the study and correction of such individual tendencies becomes a logical sequence. The advantage to society of effective dealing with the individuals in question must be beyond question, but beyond all this, an opportunity so afforded to probe deeply into the sources of human delinquency under scientific method with sympathetic spirit may be made to yield incalculable help in the study of social problems.

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March 10, 1911.

CHILD LABOR AS RELATED TO THE STAGE

IN discussing the broad topic of child labor, it is desirable to bear in mind that we are dealing with a matter, the positive side of which is a matter of economics, the outgrowth of industrial conditions in which the moving factors have been to a large extent matters of apparent necessity.

On the negative side of this question are arrayed considerations humanitarian, sentimental, and for the most part beyond any question conservative. It is almost universally true that under such conditions the material factors represented in a system which has become fixed, have a stability and lack of elasticity that makes gradual and carefully studied reform extremely difficult.

On the other hand, it is true that propaganda looking toward abatement of conditions which are regarded as pernicious proceed upon lines of feeling and denunciation not always tempered by calm consideration either of the conditions or of the circumstances through which conditions have been evolved.

Of course, this is tantamount to arguing that this subject should be approached calmly, fairly, and with full knowledge of the facts. It is especially true of the child labor problem that this sort of scrutiny should be applied by all concerned.

A priori, it is hardly to be disputed that strenuous labor is for children an undesirable thing.

It is probably just as true that much of the schooling of children who are not called upon to work is undesirable and for very much the same reasons. Yet to the school we are so accustomed and to its undesirable features we are so obtuse, that there is hardly a voice raised in an aggressive way looking to the remedy of conditions which are stupid and

distinctly damaging. The fact, however, that the alternative of school life for children is open to grievous objection has absolutely no right to weight in discussing child life as related to industrial conditions. Our problem involves no balancing and disposing of all social contingencies. Progress is not made that way. The problem before this organization is that of weighing upon merit the advantages and disadvantages in child labor and defining as accurately as may be the territories of safety and desirability. So when I approach this question of the effect upon the physique of children of any pronounced form of continuous labor, I shall approach it without reference to the great mass of shifting and complicating social alternatives and upon the distinct ground of physiologic values.

There was a time when medical men and physiologists were disposed to regard the problems of childhood as the problems of mature persons in miniature. It is not very long since this view has been recognized as fallacious, and we are hence not in possession of abundant data from which to propound unquestionable principles of child development.

There is, however, an abundance of knowledge at our hand to justify emphatic expression upon many phases of this question.

It is most valuable in analyzing the subject to consider the notion clearly defined that youth is the period of growth and formative activity and that mature life is a period of fixed and relatively inactive growth processes. Immediately arises the question, How much more can a young animal be expected to do with his machinery of nutrition than merely to grow and maintain a proper physiologic balance? We know that in isolated instances prodigious feats can be accomplished by young animals and by young humans, feats of mind and feats of body, but that is in no sense an answer to the question. With human beings the question is not as to what the young can do, but

what they can appropriately do with respect to the many years of life it is hoped they will endure.

Upon that basis it is safe to say that there is a point at which expenditure of energy through voluntary activities is in ideal adjustment to those processes of nutrition and growth which we consider distinctly vegetative. Expenditure of energy beyond this point means at the expense of proper growth. Effort below this point is as plainly but perhaps not as seriously unfavorable to development.

There can be no doubt that this point varies in different individuals and that there is hence great difficulty in determining for children in masses fixed lines within which they shall all travel.

Educators are coming to see this, and the process of differentiation in educational matters is becoming a matter of close investigation. This applies not only to the curriculum of school, but applies and will still more apply to physical conditions under which school children live.

The principle which is gradually being evolved in educational matters is this: that there shall be an elasticity in school curricula which shall enable the various degrees of mental and physical capacity to find proper measure and accommodation.

Through it all runs distinct recognition of the fact that the tendency of school is to over-confine and over-restrict and more or less over-work the young child. If that principle is sound as applied to school life, with its comparative latitude, short hours, and desultory character, why should it not be invoked to determine what is proper as to labor for children? The question admits of no argument.

As a human proposition it is far more important that the factory be estimated upon this basis than that the school should be. As a practical proposition nobody can question that the effect upon children of long hours, rigid duties, sustained effort, and more or less bad hygienic conditions which prevail of necessity in industrial pursuits,

are damaging to the physical welfare of the individual child. If damaging to the physical welfare, there is equally no question that they are limiting to the mental development and perverse of the moral development to a greater or less extent.

Let us grant for the sake of extreme fairness that teaching a child dexterity, industry, and responsibility has a value. Can any honest mind doubt that these alleged advantages are more than offset by teaching it the dexterity of an automaton, the industry of a driven slave and the responsibility of a premature burdenbearer?

These are matters to be discussed not in terms of scientific definition or of physiologic abstractions; they are to be discussed in the light of common sense with the evidence open to any honest mind. Let any adult consider the effect upon himself of prolonged, tense, exacting labor, particularly with reference to his reserve supply of nervous energy, at the expiration of his day. Let him then ponder upon the status of a child, called upon for relatively the same kind of expenditure, in the light of the fact that that child needs for his formative processes many times the nervous energy which the adult needs. The conclusion is unavoidable, that there is in our most aggravated trade conditions a relative imposition upon the child far greater than upon the adult.

The damage to the child is primarily in the inroads upon its nervous system, the robbery of his vegetative life to supply his voluntary activities. The effects of this demand are remote, because operating through a long series of defective nutritive processes which find their expression years hence in failure of development on the one hand, or exhaustion of nervous resources upon the other. Is there any lack of facts to substantiate all of this picture of demoralization?

The facts are too simple of demonstration to need argument at this date, and yet, the question may fairly be asked,

Are these evils equally true of all forms of child labor? Are we not trying to generalize too broadly and to dogmatize too definitely about matters which have strong specific differences? This question is asked in many directions by those who see less clearly than we the undesirability of child exploitation.

I am disposed to agree with those who argue that all fields in which children are employed are not equally objectionable. It would be idle to argue that there are not differences in degree of undesirability in various pursuits, and it is fair to discuss whether some of the employments of children have not enough advantage to offset the disadvantage.

This brings us to the immediate subject in hand, the question of employing children upon the stage. It is pointed out that the tendency of stage training for children is in the direction of education, refinement, and general elevation of level; that of necessity they are cared for physically; that their usefulness depends upon a certain degree of culture; that their pursuits are of a pleasure-giving quality as compared with industrial pursuits; and that, above all, their economic usefulness as wage earners is far beyond that of ordinary child laborers.

In support of this can be cited numerous well known examples of people brought up from childhood on the stage who have achieved great personal worth and public importance. Supposing that all that is alleged to be of advantage to children upon the stage is true, does it carry conviction as to the desirability in general of that life for the young?

It may be true that children who are to be employed upon the stage will be physically somewhat cared for; that they will be comfortable and perhaps live in relative luxury as compared with what they might have had otherwise. Let us assume that it is so. Does it imply any physical advantage in the end? Obviously not the least, unless

there can be associated with it definite hygienic living, such as will offset the perversion of natural habits incident to the hours of employment and the pampering influence of comforts which are devoid of the elements which tend to build up vigorous bodies, and also some sort of mental or moral surrounding tending to mitigate the unfailingly deteriorating effect of luxury, even such meager luxury as could be implied in this discussion. I repudiate utterly the notion as to benefit to physique which is thus argued.

It is true that the children in question might have association here and there with people of somewhat more cultivated type than would be normal to them; that the nature of the calling is such as to evoke some degree of mental response which on the whole would promote intellectual development. When one considers, however, that the culture of the stage is on the whole specious and superficial and that the stimulus that it affords to the young is that of excitement and imitation rather than fundamentally cultural, it must be concluded that a view which holds this of great use to the young is very narrow.

To any extent to which it affects children in a stimulating way at all, it does so through the medium of highly strung nervous unnatural appetites and aspirations, false standards and faulty methods, which are calculated to ruin the nervous balance, mental poise, and moral unfolding of the average child.

We are prone to attach to the conception of art, some mysterious, ennobling quality. Is it true? A fair survey of the field of art as it is recognized to-day will absolutely dispose of that contention. Either it is not true at all or our conception and definition of art has got to be radically corrected and the field of art enormously restricted. Hence, to create for the child a conception of great privilege, based upon art as it is now regarded, is to put forth a fictitious situation empty of real possibility and pregnant with opportunities for permanent damage. No discussion of child

culture has any value that does not take into account the effect upon character which the life experience offers.

Naturally, people differ as to the qualities most admirable in children, as they differ upon qualities most admirable in men and women. It is for us to advance and maintain such views of character and quality as seem to us most sound.

Is there anything in the realm of childhood more disquieting than precocious sophistication. Consider it not only upon the side of premature knowledge and familiarity with the undesirable phases of life, but consider it in its reflex upon the individual nature.

Consider how possible it becomes for a child to acquire that self-consciousness which puts it into strained relationships with nature and with life; the certainty with which simple and outspoken honesty is eliminated and for it substituted artificial expression and indirect mental process. Consider what a child so equipped has to overcome before there can develop foundations of integrity and morality upon which every individual sooner or later has got to build personal character.

Life is bad enough as it is without offering to the young a double distilled essence of mental and emotional poisons such as is inevitable here in the tense and aggressive work of portraying all phases of human experience in the form of the drama in its present relation to the public.

There is great question as to how far the young should be fed with this material as an audience; how enormously aggravated is the damage to the participant.

But, it may be said, we are taking this too seriously. These things are plays, imaginary situations, more or less humdrum to those habituated. Let us see what that means.

Has anyone ever gone behind the scenes, particularly after being impressed by good art upon the stage, and failed to have a wave of depression as he views the utter lack of relation between the portrayals of the stage and the life of

the actors? To the mature mind, it is true, there may be possible accomodation of thought whereby art and portrayal may separate themselves automatically from the sordid conditions of stage business, but take it by and large it may be said that if the admiring public could see all of the preliminaries to the most magnificent stage success, nothing but ruin could attend the disillusionment.

This does not at all imply viciousness or any undesirable moral quality. It is a mere matter of psychology, and to those who are trained in stage affairs, doubtless rather a negligible matter, but to the young and impressionable who are building up an experience in life in which they are acquiring standards as to life, realities and values, it can not fail to be a demoralizing influence.

Not only will its demoralization show in doubtful and uncertain standards but it will show concretely in the nervous development and expression of the individual. Excitement, ambition, emulation, indiscriminating fascination, all come rolling upon a child in such a way as to overwhelm all but the most exceptional.

If what is at the end of the road were the most desirable thing to attain, this process of attaining it would be too perilous to sanction it. In proportion as that attainment is less ideally desirable, the wrong to childhood, involved in exploiting it to this end, proportionately increases. Can there be an advantage from any point of view strong enough to justify the sacrifice or the risk?

Those who are viewing the welfare of humanity from the standpoint of medical training and particularly illuminated by broad medical experience, are very clear in their belief that progress in human happiness is closely related to health. The more we know of this subject the more we realize that mental development and balance are not to be separated from other physical questions.

There is reciprocal relation between bodily states and mental states operating through the nervous system that

makes the importance of well developed, carefully preserved nerve centers vital. From a medical point of view, no influence bearing upon the development of childhood is more important than those which a child encounters in this period of nervous growth. From a scientific or from a common observation standpoint, conditions which tend to over-stimulate, over-fatigue, and generally unstabilize the nervous system of children are destructive for the most part, and if continued too long, beyond correction.

There can be not the least question from the point of view of those who understand and without prejudice pronounce upon these questions of child evolution, that stage experiences in general are amongst the most vicious conditions to which children can be exposed. The whole movement is without the slightest justification from the standpoint of the welfare of the child, and this fact alone should be enough to stigmatize the effort to create an industry for children upon the stage, as a social abomination.

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PROBLEMS OF VISITING NURSES

IT is a privilege to come here and participate in these proceedings, really a very great privilege. I had the temerity to come here and serve upon this program without asking anybody what I was to say, which is always a risky thing to do, both for me and for the management. On the other hand, it leaves me free to say about what I want to say, and what I want to say is merely an epitome of a lot of experiences in which I have been involved in connection with the visiting nurses' work directly and indirectly. I have never been able to feel, and I do not feel, that in itself it is a great misfortune to be poor, but I do feel and I shall feel more and more as the years go on, I know, that it is a very great misfortune to be sick, and you know and I know that with all the wonderful facilities that there are in the world for the amelioration of suffering, they are not, up to this time, for the poor, and inasmuch as they are not for the poor, they are really not for the world. The inception of this visiting nursing work is love, tenderness, sympathy—there can be no doubt about it. The significance in the touch of these workers is help, hope, encouragement. Spiritual uplift is in the very initial touch of the district nurse.

I need hardly go into a description of what that is, since Dr. Worcester has pointed out to you what the district nurse does, in her indescribably irregular routine. She meets the situation as she finds it, goes into a house and finds it squalid, dirty, careless, ignorant, and hopeless, and instantly measures her forces. In five minutes there is not an individual in this house who is able to do something that is not doing something. The house is cleaned, the bed

is changed, the patient is attended to. The place is at once organized and the psychology of the change in the sick room is beyond description. The result of all this, of course, is enormous comfort, but the result is more than that, and to this I call your attention with the utmost seriousness as bearing upon any class of people,—the result is an increased self-respect. This is no pauperizing process. This is not making people feel dependent and more or less disgraced. It is essentially, fundamentally, and most unquestionably a contact whereby self-respect is markedly increased.

You see from this that one conclusion is to be reached, and that is that the work of the district nurse, important as it may be as a physical factor, is more a mental and moral influence, and like everything mental and moral in life, of paramount importance. This the district nurse does, almost without knowing it, but she does it. It is a great educative matter. She no sooner gets involved with her work, with various classes of her work, than she finds she is established on relations of great intimacy. The next thing she comes in contact with is the school, through the children in the house, and immediately takes up and establishes relationship therewith. Then she finds herself connected with the industrial situation, closely related to the factory, shops, whatever it may be in which her group may be interested. It becomes inevitably so, whether she wants it or not, and the result is that she finds herself at once a factor in the social situation which is unique. Having done this, having worked along in the course of her contribution to this situation, she finds herself a very important person. No district nurse who fully realizes the breadth of her field can fail to feel an importance to her duty, to her work, that prevents her from being anything but serious and responsible. In the first place, she acquires, above all people in the community perhaps, insight; she acquires an understanding of how those people think and feel and live. This is of the utmost importance when you consider the fact that she also, by reason

of her relationship to the organization in question, has access not only to the people whom she is nursing, but to the people who are so far outside of that world that they have neither comprehension, nor any possibility of comprehending without some such assistance, the way those people think and feel and live. And, from the fact that she has insight, and has access to both levels in the social structure, and moreover has the unbounded, undoubted confidence of both parties to this operation, there comes upon the district nurse individually and collectively an obligation in the social fabric that is second to none—I make no reservation in my own mind.

And that constitutes the first stage of the visiting nurse development—the development of usefulness, the development of powers and responsibilities. As soon as that height has been reached, the organization or the individual, as the case may be, reaches another point. They find it necessary to take their bearings. The thing is becoming too big, perhaps. It is reaching out. What are we going to do? What is our status in the community? We have received a recognition. We as visiting nurses are authorities in our localities. We are distinctly clothed with authority of various kinds, and people are looking to us for guidance, for instruction, for protection in various ways, and as a local factor the district nurse becomes, to a degree that, unless you know about it, you would never believe, a factor and a monitor in the community in which she is operating.

Again, she is expected to have, and she gradually does have, as she must have, vision. She must be able to see not only into the hearts of her people, but into the future, into the community, into all the weave of the fabric of society which is going to bear upon her proposition. And all this is accorded her without a word by her people, dependents and colleagues. That is her recognition, and just the minute she is recognized in that way there comes in all this variety of functions which we are struggling with as

practical problems. She is wanted as a sick nurse; she is wanted as an insurance nurse; she is wanted in connection with the Associated Charities; or she is wanted in a number of different capacities because of her essential adaptability to the situation.

And so comes along in this whole visiting-nurse problem the great question of expansion. It is inevitable; it must come, and what can be done about it? It is a silent unobtrusive process at first. It is another nurse here, another nurse there, and finally we have doubled our quota. After that it becomes an expansion in functions rather than in numbers, and we find this function is taken up—the school nurse, the insurance nurse, the industrial nurse, whatever it may be. But finally, when we have got to that point, we have reached practically an *impasse*, and this has happened to every organization in some form. The point has been reached where the structure is greater than the foundation, where the foundations have got to be broadened in order to insure the stability of the superstructure.

And so we come right up to the point that you are at here, that we are at in Chicago, which they come to in any place I know of, the question of the orderly reconsideration of the whole problem to determine what is the course to pursue. Shall it be a course of expansion, or shall it be a course of contraction? It has practically got to be one or the other. Shall it be that we follow the legitimate evolution of this medico-sociologic thing, or shall we set arbitrary definitions to which it shall be confined? And this is a question which faces us as a very important question, because no work which has in it the inherent values that are in this system of visiting nursing has any excuse for being jeopardized by mistakes, and the obligation to settle this question wisely and broadly is enormous.

So we come sooner or later to the question of establishment of values; and what are the values in this situation? I shall not take your time to go into it very deeply, but let

us start with the beginning, the idea of service to the poor. Let me ask you, "Who are the poor?" Do you realize that with the vast majority of people in the world, the line between independence and dependence is drawn sharply and definitely at the day's work? Do you realize that the absolute value of physical vigor of the worker in a family is the determining factor in his status as between dependence and independence? That is a very close margin in practice, but it is an exceedingly uncomfortable fact to live with. It is a very serious matter, as anyone who has had any financial difficulties anywhere knows, that the status of yourself and children is determined by as narrow a margin as your ability to go to work to-morrow. And yet that is the fact that obtains with most of the world. Therefore the question, "Who are the poor?" becomes essentially a relative question. The question becomes, not "Who are the poor?" but "Who are the well?" That is the question in the world, and when you come to put it that way you see that the function and scope of charity, philanthropy, or social service, whatever you call it, in this direction, is liable to be multiplied way beyond anything that you may anticipate, because the territory extends far beyond any mere hypothesis or conception of pauperism. It has nothing to do with pauperism. It is essentially an industrial question. Hence, this service, primarily for those who are temporarily dependent—and that is the term I prefer, rather than "the poor"—this service for the temporarily dependent is the greatest boon that is conferred by this kind of an organization. And yet it by no means defines the limits of values in this work. The community is essentially and fundamentally interested in this question; it has something at stake. The community, for example, can not afford to have a case of tuberculosis in existence one minute longer than is necessary. The incipency of disease is the key-note of the handling of that situation and of a multitude of others. The relation of visiting district nursing of some sort to that question of incipency is vital.

Then comes the question of limitation of the spread of disease. The community cannot afford to have one more case of typhoid fever in progress than is absolutely necessary, and whether typhoid fever will spread through an entire family or not is liable to be determined absolutely and solely by the district nurse, and the community has not the slightest justification in not furnishing that nurse in that situation, to avoid the risk of any such thing.

Moreover, the great problem of the administration of charity or philanthropic contribution of any sort is the problem of money. Experience has shown that the most economical use of money that can be made in connection with the care of the sick is that which can be done through an adequate service of district nursing, and therefore the community is again involved in this query, Who pays the bill of all the sickness in the community finally? The community. You may not see it, you may not feel it, you may not know where it goes, but the community pays the bill; and the community is consequently concerned in this question of conditions, the things that create conditions, and the things that modify conditions. The information and the energy necessary to deal with the situation is possible of development under a sufficiently comprehensive scheme of district nursing.

So we find that the district nursing possibilities, in the combination of nursing functions and sociologic situations, are almost unlimited. We find another thing—they are not quite fit to stand alone. District nursing can not be a success in all its particulars except it be associated in some way with a wise contribution of medical knowledge. It brings before us definitely the question, which is a very delicate question from a physician's standpoint: Are the resources of medicine known to the world available generally for the common good? And the answer to that question is unequivocally, No, they are not. The availability of medical knowledge for the mass of people is pitifully, painfully—I don't know but I may say culpably—meagre, and

the question is: What are we going to do about it? I want to say that I believe the medical profession, the whole medical "business," is bound to undergo a radical transformation. I can not now stop to develop what seems to me the future of medical practice, but I do want to say that any solution of this question which does not bring into availability, practically, all of the possibilities known to medicine for everybody, is a dead failure and not in any sense a solution. Now the question often is: Is it just, is it right, that the poor shall be able to exact from the world a degree of medical comfort or benefit or skill, or whatever you choose, when they can not get the same relative benefits in any other direction? I answer, that it is my conviction absolutely that they are so entitled, and I believe the future will show that the health of the people will stand in relation to the public contribution, whether it be official or unofficial, in an entirely different light from most other benefits. Shall we regard health like groceries or clothes? In my judgment, it is not going to be so. Health is going to stand by itself as regards its availability, and I am clear in my opinion that we shall see the time when nobody is so poor but that the best of medical resources can be secured for him. Necessarily, for a great while that is going to be a more or less feeble, perhaps half-hearted, process; nevertheless, that thing is going on, and while it is in a state of imperfection, in a state of development, both of facilities and conception, there is one way that the medical profession can make progress with reference to enlarging its field of activities, and that is through the coöperation of a trained body of nurses which shall be an intermediary between its knowledge and the application of it in various directions. As I look at this matter of the development of the medical system of the world, as I look upon this question of public health in all its future aspects, I come to the conclusion that the combination of medical scientists and trained women nurses is indispensable. This is not said in reproach of the medical profession, it is simply said in forecast of what the medical profession will see for itself.

I now come to one question which is very important — I have only a minute to talk about it—and this is the question of specialization among nurses. The tendency is to divert nurses' energies into this direction or that, that really leads them into a field of specialties, and I believe it is necessary. I believe the general nurse, in making her visiting rounds, is not the best nurse to be a tuberculosis nurse in a certain class of tuberculosis cases, particularly incipient cases that are the educative cases. I believe the general nurse, engrossed in her work, is not the best nurse to deal with the question of infant feeding. Why do I believe these things, for I did not always believe them? I believe them for two or three reasons. In the first place, because there is too much to do, and division of labor becomes a necessity. In the second place, there are very few of us that have the kind of minds that will reach out and grasp all sorts of questions. It is a great deal easier to train us to do well — perfectly, if you like — a thing or a few things, than it is to give a full grasp of all sorts of problems. Considering that our supply of nurses is limited, that we cannot reach out for the exceptional women in all directions and bring them in, but that we must take the supply as we find it, we have got to adapt our work to the particular capacities of those people, and some nurses are better in one line, and some are better in another. Hence, in my judgment, specialization is the thing of the future. Moreover, the work will be better done by the specialist among nurses than by those who undertake to do the whole thing at one time.

Now I know what you are thinking about in regard to that. Those who have had experience in this matter are prone to say that specialization leads to duplication, leads to two or three nurses doing the same thing, going to the same house. I agree with part of that statement, and not with the other part; it does lead to two or three nurses going to the same house, but it does not necessarily lead to their doing the same thing, and I want to call your attention to the distinction between duplication which is merely geographic and

duplication of function. It does lead to several nurses going to the same house sometimes, which means the question of care, but it does not mean the question of duties, and that is the crux of the whole matter. So there may properly be one nurse taking care of the case of rheumatism, and another visiting and patiently teaching the case of incipient tuberculosis, and another instructing the mother in feeding her infant. That this may lapse into an indefensible duplication must be recognized. Where are the safeguards against this? How are we going to keep from falling into this pitfall? The safeguards are two, both of which are deeply developed in this community. The first safeguard is organization, such central organization as will have a general oversight over the function rather than merely over the distribution of nurses of all kinds. And in the second place—and I want to say to you that this is far and away the most important factor in the situation—the second safeguard against clash among these various classes of nurses is spirit, the spirit of coöperation as against the spirit of conflict of any sort. It is the most difficult thing absolutely to secure; it is the most potent thing in the situation, once it is secured.

You will see, consequently, after this very superficial touching on some of the phases of this subject, that I at least have basis for feeling in the matter, and that I at least see what the problem is in some of its phases in the working out. There is just a word that I want to say in conclusion. Be not afraid of a conception of this institution that is big enough to fill the bill; be not afraid of the social worker or the specialist, or of any of the innovations that come out of this. Look to the regeneration of the medical profession as the greatest possible additional force and value in the work. Feel that the development of the future is not to be determined by the perplexities of the present. In order to be in the front of the work in the future it is vital to have had a large enough concept.

Date and occasion of writing unknown.

THE IMPORTANCE OF THE VISITING NURSE

THE work of the visiting nurses is a serious business. Started originally as a measure of tenderness and sympathy, it grows as a rule into an institution, large, complex, and markedly inter-related to public questions which increase its importance and responsibilities enormously. In its inception it satisfies a sentiment of philanthropy quite justifiable. In the course of its growth it tends to create conditions which can only be adequately met by wise and comprehensive organization.

In the course of every such development there come periods at which the thoughtful inevitably pause to take their bearings. Valuable service brings recognition and recognition brings greater opportunity, and that in turn a demand for extension.

There comes a time in this process when the structure is out of proportion to the foundation, and at this point the only method of dealing is that which applies to all serious business. The time arrives in any community engaged in this business to take stock, to review the value of present activities, facilities at hand, desirable projects and possible development of organization. No work of this importance is justified in proceeding without this orderly reconsideration of the whole matter.

Primarily, is the work involved worth doing? There can be no question about it. This is not a work designed only for the poor. It is designed to meet this fundamental, not well recognized fact; the line between independence and dependence is drawn definitely and sharply at the point of physical vigor. Most people in the world are poor at the point of sickness.

The sentimental value to the community of being able to extend succor at this juncture is immeasurable. These

facts, however, develop immediately a further situation. It becomes to the community a matter of imperative economic importance. Conditions pertaining to the majority of the community which determine the status of dependence and independence are of paramount importance. Influences which affect those conditions favorably or unfavorably are matters of serious consideration. No social force at work is more crucially related to this matter than the work of the visiting nurses. It hence becomes to the community a vital interest.

Neither the philanthropic nor economic considerations here referred to are entirely met by merely skillful nursing. The matter of medical contribution to this situation is also vital. Let us put this simple question, —Are the present resources of medical science available for the benefit of the public? The answer is, unequivocally, no. With all our machinery, philanthropic organization and personal devotion, the distribution of medical values in the world is pitifully meager.

The medical profession is on the eve of radical transformation in its relation to the public weal. The detail of this it is not necessary to relate. Suffice it to say that medical contribution practically can not be made except through the coöperation of a trained intermediary body. If the physicians at large are going to justify the demand which ethically can be made upon them, there must be established and maintained a coöperating machinery which shall effectively apply the knowledge available for this purpose.

The highest possible development of trained nurses under the organization we are discussing will be necessary in order to perfect this project.

Of these three considerations, ministrations to the suffering, self-preservation of the community, or salvation of the medical profession, it would perhaps be difficult to designate the most important. The fact is clear, however, that they are inseparably related and that no manner of dealing with this visiting nurses proposition that does not encompass the entire scheme will be either adequate or defensible.

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RURAL HYGIENE

IN considering hygiene, rural or urban, we are prone to forget the simplicity of its principles in an endeavor to meet the complexities of its application. One law underlies the hygiene of all life, and it is as infallible and fundamental and determining for plants and animals as for human beings.

The processes of life depend upon adequate appropriation of food and innocuous disposal of waste. These terms are to be interpreted broadly, to cover air and water, but with this inclusion the principle is complete. Two sub-principles are universal: (1) regard for the interests of coexisting life, be they reciprocal or antagonistic; (2) adaptation to conditions of physical environment. Out of interaction of these principles must be evolved all hygienic and sanitary law. Waiving for the moment questions of access to food and mutual protection, the problem of individual safety from a hygienic standpoint is difficult in direct ratio to the multiplication, which involves proximity, of other individuals. Community life, evolved primarily as a measure of safety and economic facility, becomes rapidly and effectively a menace to its individual components. With every refinement of civilization has come deeper disturbance of primitive law of supply and demand. It is more than a jest — the recipe for rabbit pie. One might starve, but he never would be overfed if he had first to catch his hare. It is just as certain that those would starve or freeze or be devoured who are unable to provide for themselves; and this is nature's inexorable law. We have substituted for natural selection social devices, and we are slowly coming to realize the penalties involved, and to feel an obligation to meet the exigencies. For the checks

and balances of limited food and shelter, and instinctive guidance in their use, we have substituted relative ease and plenty, and adopted an imitative method which results in custom and habits.

There is but one method worthy of acceptance in social development: to prove all things. In the proving it becomes obvious that development of custom has followed lines dependent on the possession of material resources, in part, and only in part, heeding the principle of appropriate use of food and adequate disposal of waste.

Let us pause to reflect that waste is not only the obvious matter of excreta, in which the community is especially interested as against the individual, but it is also the fine chemical question of cellular waste and its disposal, in which the individual is interested as against himself. It is doubtless in respect to this proper balance in bodily processes, which one may venture to call physiologic cleanliness, that the most profound hygienic laws may in the end be determined.

The question for us is: Do we care to adopt extraordinary means to protect ourselves, or shall we let nature operate unmodified? Thus far we have seen fit to modify the operations of nature widely. Why not in this most vital struggle? The logic of this is too plain to justify argument, and yet we are, as public-spirited citizens, in the throes of a struggle to institute and maintain simple precautions against the dangers of community life.

It is true that the measures suggested have not always been wise, and that opposition to a plan has often submerged a principle. It is true that conception of the principle has been defective, and methods, by reason of their provisional character and tentative scope, have not reached the root of matters. Nevertheless, there is but one ground upon which civilized people can stand,—the paramount necessity and obligation to provide conditions for all, which are wholesome and which permit the observance of hygienic

law. I ask you to observe the statement: "wholesome conditions that will permit hygienic living." Wholesome conditions demand sanitary law; hygienic living demands intelligent habits. Sanitary law without personal hygiene is vastly limited in its beneficence. Correct habit in unsanitary conditions is more or less futile.

Both lines of this development must be advanced. Unfortunately, they do not, as a rule, proceed *pari passu*. Sanitary law involves but the intelligent action of legislators. It is prompt and effective. Hygienic living, on the other hand, involves substitution of habits for other habits—in the mass, a colossal undertaking. Logically, one might believe that when a people, by and large, had correct ideals and corresponding habits of life, sanitary law would be unnecessary, or easy and inevitable of achievement. Doubtless this is true, but need we postpone for an event almost millennial the benefits of common observances which never will be superfluous, and which protect a large portion of the territory we are striving to redeem?

In comparison with the problems presented by city conditions, rural sanitation has few inherent difficulties. From the standpoint of public administration, a coefficient of difficulty could be adduced for all communities based on the number of inhabitants per acre. Upon this basis country sanitation becomes simple, though not so trifling in view of the fact that animals must be included in this calculation.

Why, then, is sanitary progress in rural districts not markedly in advance of other communities? Admittedly it is not. In many directions it is far behind. Two facts in explanation of this are pertinent. The simplicity of a problem bears no relation to its early solution; besides, rural advance is unduly tardy. Moreover, the deepest reforms arise out of conditions the most aggravated. The country has not these. The natural evolution of sanitary standards is here not to be trusted. For this reason

specifically and intensely directed attention is indispensable in most districts.

When one affirms the simplicity of country sanitation from the general administrative side, or the possible habitation side, he must not ignore certain specific difficulties that are on the social and industrial side. Isolation implies relative safety from contagion, both to the individual and to the community; but it carries with it complex industrial function and freedom from scrutiny. These two factors are of paramount importance in the present status.

Let us illustrate. The farmer has a small dairy. He and his wife and children milk as a regular duty. A case of typhoid fever occurs in the house. The wife is nurse and milker. The father is milker and distributor of milk in some fashion. The children are variously either. Compared to the process of walling off a case of typhoid in the city, consider the complexity of this farm situation. The patient must be nursed; there is no one but the mother to do it. The cows must be milked—she must do her share. The milk must be disposed of—shall it be thrown away? There's the rub. With no one to know what goes on, why waste it? Or, if thrown away, what a relatively deep inroad into the family income. All the work to do, all the expense, and no return. Is it any wonder that farmers are not looking for sanitary restriction? Yet this is inherent in the complex function of a farmer's life.

This is no reason why the question should not be met and dealt with thoroughly. But it is one of many illustrations which should lead to the conclusion that rural sanitation should not be directed from the viewpoint of the city, but by careful study and provision for its specific necessities. Supervisory control of sparsely settled districts is not feasible. By as much as the individual is a relatively free agent, by so much is his reliability dependent on his integrity of purpose. The very conditions that make rural sanitation feasible determine the lines upon

which it must go. Here the emphasis must be placed upon individual responsibility. By no other idea can it adequately be met. This does not mean that the principle is different in the two cases. It does mean that relatively perfect sanitation is possible in the country.

While I have no reservation as to the importance of developing sanitary law with all speed and force and wisdom, I am firmly of the opinion that it offers but a partial solution. The most that it can do is to remove untoward conditions. The essence of the matter is personal hygiene and its underlying ideals. In this regard the most favored class is not materially in advance of the less favored. The essentials of personal hygiene are few and simple, but by no means easy of attainment, for there is involved that most difficult factor, self-discipline. It is absurd to seek the possession of health in sanitary enactments. It is not a matter of law, but of character. On the surface, this is not very obvious. Life is so automatic, specific resistance and vigor differ so widely in different individuals, and, especially, cause and effect are so far separated in time, that this picture is of necessity obscure. Nevertheless, I am convinced that any individual can materially enhance his health, and increase his resistance to external attack, by judicious living. If that be true, it follows that education and character are the cornerstone and keystone of the structure.

Assuming this, how does it bear markedly on rural conditions? In principle, not more than in all environments, in practice, in promise, in possibilities, it is of immediate significance. Self-respect and freedom are the birthright of the farmer. They are also the basis of character. In so far as they fail of full development, a blight is upon the harvest.

Is it a far cry from the fundamentals of farm life and its psychology to health ideals? I hope so. I have no faith in remedies less searching and remote. Let me be not

diverted from my philosophy by obvious disconnection and apparent indirection. Do you recall the wisdom of the men called upon to administer the Rockefeller fund for the improvement of education in the South? Do you recall that they discovered that what was the matter was lack of productiveness of the land, hence lack of money, hence lack of independence? Did they begin by supplying money for schools? You recall that they began by educating the planters in the art of agriculture, confident that schools would follow that uplift. So here the psychology of rural life is what we need to study. Upon it turns the entire hygienic and economic future.

Farm life is not a bed of roses, but its advantages and compensations are far from being appreciated by those engaged in it. Drudgery and routine and monotony are there, but not to compare with most city occupations. Mental isolation is there, an incubus more than offsetting the advantage of physical separation. It is this that breeds conservatism, upon which the State has counted for a large measure of its stability; but it leads, too, to ultra-conservatism over which we stumble in social advance. Small margin of profits is there, leading in the best type to frugality, and in the worst type to shiftlessness. Desire and prospect of property are there, leading to a jealous hostility to imposed expense that may defer economic independence. Inertia is the result, a static factor to be overcome from within, and but indirectly from without.

A deeper consciousness in the farmer of his relation to life is the desideratum. Not only are the dignity and importance of his function, as the producer of the world's sustenance, important for him to realize. A larger lesson of self-assertion and a comprehensive view of his commercial relation are essential to his full sense of freedom. Out of this will grow his clearer view of adaptation of means to ends; proper utilization of resources; economy of effort; and truly ethical conservation. Pursued to their end, they

would evoke nothing but self-esteem. Self-respect involves a deeper note. It demands civic consciousness, a sense of community responsibility, participating, not selfish, life. That motive is beneath all great accomplishment. It is simple and vital.

But, it may be commented, the physical and industrial conditions are unfavorable to community life. The farmer has scant time for social intercourse. Granted. But he has time to establish his mental attitude and determine his own standards, and this is far and away the greatest contribution to the common weal that men make. It is the very gist of the country-life question and may as well be proclaimed. In many respects there is not as much community life in the country as there was years ago. It is not safe to generalize too broadly on matters so complex. Yet I venture to make this comment: women on the farm have not the interest in the intrinsic features of the industry that is necessary for their contentment or their fullest development. Agriculture has gone in long strides in interest and effectiveness. Men have kept pace variously. Boys have grasped it eagerly. Woman's work on the farm, arduous as it is, is not as burdensome as it used to be. Has she lightened her load by the stimulus that comes of real interest in and comprehension of the vocation of which she is an indispensable part? My observation is that she has not.

The trouble lies in education. Neither to boys nor to girls is education offered of a character to adjust the matter. Once more I am conscious of the danger in generalizations. I have, however, but to point to the interest and enthusiasm created by signal departures in agricultural pedagogy to justify my statement. It is not likely that rural education is better or worse than much city schooling. The criticism is almost universal that we do not, in our educating, fit for life. Our problem, however, is the rural school. Being less developed and crystallized, it is probably easier

of correction. I have no idea that simply adapting the course of instruction to practical agricultural subjects will solve the difficulty. Important as it is—and I regard it as an indispensable factor in the process—it will at best furnish information. The perfection with which this is done will make the determining step more certain and valuable, but the determining step will none the less be needed.

And what is this step in which I seem to have such confidence? Socialization of the school,—an inadequate phrase, perhaps, but a text. Cities and towns have many social devices, the country few. We are saying a great deal of late about giving the young people in the country more social latitude. They need it, but our suggestions easily become forced and artificial and in so far doomed to fail. The school is a natural center, organized, financed, and recognized. It can be made the clearing-house for the community intelligence—not for men or women or children, but for all; the place where youthful eagerness can meet and interact and in turn react upon the mature powers of the neighborhood; the place where information can be transformed and vitalized into knowledge, to the end that impression may become conviction. Only so can we mitigate the waste of time and expense and life that is inherent in our present methods. All the precept in the world, even if followed, is not effective until life has ground it into our fiber. Need we always expend the most of life before we have fully incorporated our opinions? Is there not a better social organization to be conceived that will avoid this waste? Once more we fall back upon our school system to save the situation. There is no other place to look.

Once more we are face to face with the weakness of our machinery. Is it sound to look to the school system for relief? At present, no; as an ultimate achievement, yes. If, in a generation, that can come to pass, it will be a triumph. Administrative function most readily follows demonstration.

The need of the country is *leaders*—men and women with ideals and imagination. They are there in abundance, undeveloped, unheard, wasted. Technical agriculture hoped for its uplift from the agricultural college. In a measure it found it. But it has its limitations. Now comes into the field the expert demonstrator under public or corporate auspices. It is a great step forward. It has in it the magic factor of leadership. Why shall we not interpolate between our present inefficiency and our ideal educational standard a period of social demonstration? This is not a dream. Social demonstrations here and there, under average conditions, are conclusive as to possibilities. The factor needed is conception and plan. Ways and means can be developed. Of all the fields before us, the country is most inviting.

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CHILD CULTURE THE FUNCTION OF ORGANIZED MEDICINE

IN regarding the field of human thought one is impressed with the intense activity of what may, without exaggeration, be called social ferment. In every direction which one may look there is evidence of unprecedented stir. Nothing goes along its familiar lines, nothing maintains its accustomed pace. The world is agitated. This is not confined to human action; it is fully as marked in the realm of abstract conception; and through it all penetrates a spirit of intellectual adventure, which beyond doubt is the influence which is ultimately to bring some order out of very obvious chaos.

To this activity we react variously. The conservative is disturbed, perplexed, and often pained by the radical and iconoclastic temper of the time. The radical is inspired, stimulated, and often intoxicated by the wonderful kaleidoscopic readjustments which ensue on agitation of the foundations. Between abide the mass of people, partly thinking, partly dreaming, partly stolidly accepting the dictate of the day.

Superficially, the outlook offers opportunity for captious criticism. In the tearing asunder of the social fabric, dignity of life, stability of equilibrium, and quality of taste seem to be disregarded. In the desire to see the wheels go round, the delicate mechanism is threatened. In the passion for ultimate knowledge, the beauty of the flower is destroyed.

All of this reacts on a conservative temperament as a profound and distressing influence. Foreboding precludes hope and disapproval engulfs discrimination. Superficially,

too, the outlook offers undue encouragement to those who look for the regeneration of society. To them recognition means victory; and destruction of the surface, and stirring of the depths means but preparation of the soil for a new and better harvest. Enthusiasm smothers judgment and change is too lightly accepted as progress.

Philosophy dictates a tolerant scrutiny of these currents and countercurrents. It is quite obvious that there is a scientific relationship between these static and dynamic forces. Humanity has never advanced with even stride, nor by purposeful direction, nor by consecutive process. The hope of the philosopher is that time will determine more evenness, better direction, and more coherent effort. Justification of this hope lies not in the broader, deeper, and sounder conceptions of social affairs in the abstract, but in the greatly increasing approach to social conception as a wide dissemination.

The possibilities of human conception and thought are not materially greater to-day than in the days of Caesar or Cicero or Plato or Moses, but distribution of intelligence throughout the mass of men capable of apprehending and ultimately vitalizing such conception constitutes the basis of encouragement. The wisest man of to-day knows not essentially more than the wisest man of thousands of years ago. Legions of men to-day are approximately peers of the shining intellectual lights of the ancients.

Inevitably, authority wanes under this illumination. Inevitably, diffusion supplants linear projection. In the field of thought, as in the field of geography, there has been a frontier and a pioneer. In the field of thought, as in the field of geography, that period is approaching its close. The settler, developer, and the harvester from now on are to be reckoned with, and in that period the interplay of reciprocal values, of rights and privileges between individuals, and between individuals and the mass, must find their solution.

At this moment the significant note is freedom of thought. When we are disposed to bemoan the ridiculous domination of fashion, let us reflect on the facility with which tradition is thrown to the winds. As we view with discouragement the ever-recurring domination of viciousness, let us appreciate the spontaneity with which people respond to an ethical slogan.

Imitation has determined social custom. Initiative will loosen its fetters. This will not destroy the need for wisdom, tolerance, and equilibrium, and through the seething mass of human activity there will continue to move an ever-increasing element of sane, philosophic, and conservative progressivism.

To the progress imaginable under this combined movement of social stir and philosophic development, freedom of thought is essential. It is the atmosphere in which things can grow, and, for every license to which this emancipation leads, manifold measure of liberty will be poured forth.

Consciously or unconsciously through it all we are sounding another note. To a degree never before approached, posterity is the subject of solicitude.

Labor fights to the death for principles which can never materially affect the present participants. Political reformers immerse themselves in labor and study whose fruition can be not less than a generation hence. Sociologists grapple problems in the light of the future, and great ethical movements, seeking to justify and readjust human relations, plunge with intensity into a struggle, the benefits of which can only accrue to our children and children's children. Conservation, the shibboleth of political economists, justifies only in its relation to coming centuries. While immediate advantage, selfish interest, and short-sighted greed play a role as acute now as ever in the past, it is being offset, and in a large measure ultimately will be destroyed, by the overpowering force of foresight.

The substitution of solicitude for the race, as a motive,

for desire for present and personal advantage, is the most important ethical product of civilization.

For the most part in the past, sociologic effort has been directed toward rectifying the conditions under which future generations shall be developed. Thought has been expended on political construction, economic facility, social opportunity, and æsthetic development. Environment has been recognized as a factor of paramount importance in the struggle for existence and in the possibilities of symmetrical growth.

Hand in hand, constructive reform and philanthropy have attacked world problems, increasing in their complexity with the increase of population. The thought of mankind is directed with such intensity on these problems as to ensure in the progress of time a large measure of correction of the vices which in the past have determined and perpetuated intolerable conditions.

Change in social understanding and belief in respect to most conditions within a comparatively few years has been profound and almost universal. The best product of social thought is no longer to be confined to this or that focus of enlightenment. Sporadic and isolated solution of social difficulties is rapidly to be supplanted by world-wide recognition of its merit, and rapid adoption. In world affairs solidarity is already in sight, and the best attainable anywhere is sure to be prevalent everywhere.

As a natural sequence, the thought of mankind is being directed at the coördinate term of the proposition. The burning question becomes, how shall the stock for which this environment is being created be improved? The problem presents itself under the concrete term, Eugenics.

As the significance of this question dawns on the intelligence of man, it assumes stupendous proportions. In the light of human nature, social structure and spiritual philosophy, the problem presents infinite perplexity. Biologic law is universal. Human manipulation of that law inevitably

perverts the course of Nature. The checks and balances of animal existence, depending on natural selection under the principles of the survival of the fittest, have been in a large measure nullified. We have moved much faster in the protection of the individual than in the protection of the race. The result is portrayed to us in burning words and convincing illustration, by those who analyze existing conditions. The relation of crime, insanity, pauperism, degeneration, and social degradation, to primary individual defect, has been demonstrated irrefutably. The cry is echoing through the wilderness, "Reform or perish."

Thus far all that has been accomplished is a marshaling of facts which serve as a basis for the contention that conditions preceding birth must be controlled. As an individual exposition the facts of heredity and the social penalty paid for ignorance of or indifference to these facts are appalling. It is easy to prove the calamity which follows unrestrained breeding of defectives. Inevitably, the world will take cognizance of this problem and in a measure meet it, but the problem so presented, immediate and urgent though it be, is a small part of the essential matter.

Sociologists have been able with confidence to attack this extreme of malignant disease. Although thus far practical methods of correction have not been evolved, it is not a remote probability that tremendous improvement can be effected by comparatively simple legislative and social effort. It, however, constitutes what may be called but the negative phase of the proposition. Our thought in the matter primarily and for a long time in the future will be concentrated on determining what shall not happen. The study of delinquency as a mass problem and defectiveness as an individual problem will go hand in hand toward eradication of the grosser lesions of social pathology. Demand of the body politic for relief from the burden of social disease will in time determine the prevention of conditions whose causes are obvious and whose correction may prove

to be possible. In this phase of the question there is great hope and probably rapid accomplishment.

In the positive phase of eugenics, however, there is far less likelihood of rapid progress. It must be borne in mind that what we may be able to attack in the effort to eliminate defectiveness is vulnerable because of its obviousness. There are certain facts sufficiently manifest to constitute a ground for systematic effort; the subtler facts of heredity, however, are by no means thus clearly illuminated. That we are able with reasonable certainty to prescribe certain combinations because of their hereditary penalty, does not at all imply that we are prepared to prescribe other combinations whose result shall be desirable. We shall be able in many ways to eliminate the worst; we shall not be able to determine the best.

For this *impasse* there is abundant reason. Our knowledge does not cover the situation. Biologic law, plain as it is, in its simple principles, is, after all, known to us only in its outline. Hereditary transmission is a simple and comparatively unvariable fact. Hereditary combination presents problems of infinite complexity. One has but to review the comparatively few demonstrated facts of heredity in the modern view to realize the difficulty which resides in an effort to control progeny in the absence of greater and deeper knowledge. It is not even clear that combination of defectives where defects are obvious will of necessity produce defectives. How much more obscure, then, is the problem of producing offspring free from defect, when defect is possibly dependent, not only on latent ancestral character, but on the activating influence of unfortunate combination.

Little by little, social conscience will awaken to the responsibility involved in these propositions. The result of this will be a large measure of effort to avoid palpably unpromising mating, which will in turn avoid undesirable progeny. This will proceed quite independently of legal restriction. It is not, however, to be hoped that great

results will be achieved in the improvement of the race above its present average quality until the limits of human knowledge have been enormously extended. This is materially, but not solely, dependent on determination of fact. It will be in the last analysis also dependent on relative values as determined by social concept. Suppose that we had to-day to choose between the best physique and the best spiritual nature. In the light of the world development who would dare to subordinate soul to body? The enthusiastic answer is, let us have both. The practical answer is, we are fortunate if we have either.

As the terms of the proposition multiply, theoretical variations from combination reach infinity, and, inasmuch as we have not, as yet, an exact conception as to what is most desirable even in physique, how much longer will it be before we have a conception as to what is desirable in spiritual nature? It resolves itself into this: Constructive effort in eugenics must proceed on the simplest possible lines, following the outline of experience and judgment so far as possible, but for the time being utterly repudiating the notion of scientific determination of the subtler qualities of human offspring.

Much can be done by the application of common sense and reasonable judgment amongst facts which are coarse enough to be seen, but theoretical and hypothetical elaboration of eugenic schemes looking to the determination of exceptional results are doomed to failure, and for that reason, amongst others, pregnant with danger.

The most that can be accomplished now is the creation of conscience, reverence, desire, and responsibility. What the future will bring forth in constructive possibility I have no idea, but to me it is clear, that progress can be only jeopardized by ill-advised and premature assumption.

For the time being, the place to concentrate effort is on the elimination of the obviously undesirable. Even this is not simple. When as a concrete decision one is called on

clearly to define the dividing line between the fit and unfit, grave responsibilities are involved and opportunities for wide difference of judgment will develop.

On this point medical judgment must be brought to bear. With all the spirit and intelligence of the social forces actively interested, there is needed in this judgment a factor of discrimination derived from trained medical thought.

As a whole, the medical profession has not hitherto adequately risen to the situation. Whereas here and there conspicuous examples of social intelligence are operating amongst the professional men, definite and organized contribution to this matter is lacking. Not only is physiologic knowledge fundamental to the determining of lines of demarcation which shall define the territory in which these social changes must take place, but also, in the far wider task of bringing the public mind to the recognition of the needs and proprieties of the matter, are the conscious and deliberate efforts of medical men of importance. Legislation cannot proceed markedly in advance of public opinion, and public opinion will be shy and tardy in crystallizing on a program involving to so large an extent what will inevitably, though superficially, be regarded as private rights. It is, therefore, beyond question that biologic principles must prevail in the solution of this last question, and hence that it devolves on the rank and file of the profession to enunciate and expound these principles.

Important as it is that this prominent and fairly well recognized problem of the defective in society be regarded by medical men as a professional responsibility, there is still more importance in the other field.

The question of constructive eugenics, vague and intangible though it be, is urgent and imminent.

If, as I believe to be true, social conscience is fundamental to advance in improvement of the race, the matter is definitely a function of the medical profession. In the abstract, all philosophers can promulgate generalizations,

fairly acceptable to ordinary intelligence. An instant's consideration, however, convinces us that such propaganda achieve no considerable results. It is in the concrete and immediate proposition that results are to be determined. Popular knowledge will never be sufficient adequately to analyze the elements involved in a given class of combinations.

An increasing sense of social responsibility growing out of agitation in all directions is certain to lead people to take notice of the existence of such considerations. Inevitably, at the point of action they must consult what they have a right to regard as experts. Practically the only experts in the premises are the physicians. The question is squarely before us. Shall we be, so far as knowledge and circumstances permit, experts?

Clearly, we shall not be unless we realize our obligation. Clearly, we can be trusted as such, only in so far as we have met that obligation by equipping ourselves for that service. Preliminary to that development must be conviction in ourselves, that it is specifically our business. Having that conviction, it will follow that to a tremendous extent and in high degree we must be the leaders of the people.

There is no reason, however, for the medical profession to await the day when the improvement of child conditions shall be something more than a mere speculative project. Immediately before us lies the field of child culture; myriads of children exist and hourly are born whose welfare demands our most discriminating thought. On us should be properly placed the burden of determining not only the conditions under which children shall be reared, but the scientific classification by which they shall be grouped and adequately dealt with. To this end medical intelligence must be vastly broadened before the full measure of its usefulness shall be attained.

Hitherto, physiology and hygiene have been more or less promoted by physicians. They have been looked to by

teachers and parents for guidance on those lines. As a broad question of child culture, however, it is a foundation inadequate and unsubstantial. Deeper and far more intricate questions of child psychology are inseparable, and it is with reference to these that our profession needs the strongest impulse. Nothing can be more short-sighted than to assume that the provision of appropriate physical conditions is an adequate contribution to the subject. It would be possible to cripple the development of a race by an exaggerated hygienic regime.

The prime question in any life is the character of its growth. This cannot be determined without due reference to its intrinsic forces. The child in its setting in society has far more function than mere living, according to its physiologic needs. From the very beginning its personality is a determining factor in its development. The widest establishment of hygienic conditions is of only indirect avail in promoting individual growth.

It is true that the problem of physical welfare, being most immediate, is most practical as an object of attack. It is, however, of the utmost importance that we be not blinded by our hopes and achievements in this field to the fact that physiology and hygiene are but a means to an end. It is with reference to this broad field of scientific endeavor that I am disposed to lay the greatest stress—our obligation to become, to as large an extent as possible, experts. It is incumbent on the medical profession definitely to qualify on these terms.

The question may very pertinently be asked, why this field is not properly to be occupied by teachers rather than by physicians. That it is to be occupied by teachers primarily and from an administrative standpoint is beyond question. The answer to the query is this: Teachers can not expect to solve this problem without assistance. Assistance must be in the nature of coöperation; the medical contribution will be that of information and advice. Until

we have information on this subject we have none to offer. Until we have judgment matured by serious investigation and analysis our advice is worthless. If not to us, to whom shall the pedagogic forces turn for coöperation?

At the moment, the organized profession is disposed to congratulate itself on the fact that the teaching organization has definitely entered into coöperative effort in the direction of school hygiene. It is essentially a slow process, but the promise of great achievement is directly before us. The teaching organization will have similar reason for congratulation when it shall have fully enlisted the medical profession in coöperative study of psychology and pedagogy.

There is a further reason why physicians are primarily related to this phase of child development. Their contact with the subject is earlier. From birth to the time when teachers have access to the subject, the field is held exclusively by physicians and parents. Inevitably, parents must receive guidance, if at all, from their medical advisers. The fact that they are not habitually so guided to-day is not the fault of the parents. It is due to the inadequacy of the physicians. We have not made ourselves competent advisers in this direction. Again the question arises, why need this be a medical function? Why are not parents sufficient unto themselves in this responsibility?

In answer to this query and in elaboration of the general statement that these phases of development are interdependent, one may make a fundamental statement: Health is a function of character. If this be true, and the broader and deeper the scrutiny the more incontrovertible it is shown to be, it is beyond question that growth in physiology and psychology must be concomitant.

Under civilized conditions, maintenance of health becomes a question of self-restraint. It must be borne in mind that natural law in this respect is in abeyance. Our habits are essentially of our own creation, not exactly dictated by necessity. Whereas sanitary science can control in a measure

mass conditions and in a measure protect an individual against the mass and the mass against the individual, nevertheless these activities are of a coarse and generalized type and unrelated for the most part to individual life and habit.

The determining facts in individual welfare are related to understanding and discipline. Great progress in physical welfare of the race will not be made until the individual components of society are thoroughly imbued with ideals as to health standards and obligations, and moreover until they react keenly to such ideals.

It follows, therefore, that evolution of the child mind is as fundamental in its relation to its health problems as to its mental or moral problems, and we as physicians are not justified in standing aloof from this child creature to say, "Lo, we will deal with this child's body; let somebody else mold its soul."

Clear though it may be that the sound body is fundamental to racial advancement, it is equally incontrovertible that sound bodies in general will not prevail except under most careful mental and spiritual culture.

It is not enough that in our supervision of child life we undertake to provide physical conditions and avoid pernicious customs in early life. It is true that unless we succeed in clearing away the upgrowth of years, which at present tends to hamper and often destroy child-life, we shall not be able to accomplish anything. It is also true that clearing that field should be but preparatory to the real culture to which the child is entitled.

It is evident that the child should not be worked before the proper age. It is just as true that he should be properly worked at the proper age. We know that he should be protected during given periods from knowledge and contact with some matters and subjects. Do we realize that he should be deliberately and definitely led into contact with those subjects at the proper time?

We should recognize that there is a period in life when freedom of thought and action and initiative is of essential importance to the budding mind, but we should also recognize that there comes a time when specialized and strongly disciplinary direction is of paramount importance.

Many of us know the importance to the very young of protective measures as to food, clothing, and environment; few of us realize the far greater protective value of hardihood, which can be cultivated by an intelligent withholding of such protections.

Where to draw that line is a delicate question, but that the drawing of that line is fundamental to physical stamina, I have no question. One can multiply indefinitely the points of view from which to see this child question, and from each of which one could discern the importance of discriminating judgment as to what should be done for and with children.

In summing up, the conclusion is inevitable that, on the whole, the questions involved are questions to be adequately met by professional thought. Perhaps not solely by physicians, but distinctly by physicians as a class in coöperation. Again the question presents itself, and I repeat it because of its fundamental importance, are we qualified for this responsibility?

As a partial answer to that question, are we not entitled to comment on and deplore the fact that in medical education in this country instruction in personal hygiene is almost unknown, and that instruction in psychology is unthought of? In the light of the wonderful expanse and elaboration of the medical curriculum, there is but one explanation of this tremendous defect—the profession has not as yet assumed responsibility in these directions.

In casting about for a solution of what seems to be a great weakness in our medical philosophy, there offers a way to which all by-paths seem to lead.

I believe that the greatest contribution of the medical

profession to human welfare is destined to be in the furtherance of child culture. The magnitude of the problem before civilization, the complexities of adjustments which are obviously before us, the inexorable demand of the economic struggle on those who have matured and are carrying on the affairs of the world, precludes the idea of great reforms in the status and procedure of the adult race.

What is to be accomplished in the way of human betterment must be done by laying broad and sound foundations. The lessons of to-day are learned through the failures of yesterday. The improvement of to-morrow can only follow enlightenment of to-day.

The child is the hope of the race, and concentration on that hope is worthy of our deepest thought, and is clearly our noblest purpose. To that end all ethical forces in the community need coördination, that there may be effective as well as harmonious advance.

Briefly, I have stated why it seems to me that the onus of this movement rests on the medical profession. Reflection will bring to any man trained to scientific thought this conviction more and more profoundly. The question then becomes, logically, how are we to proceed?

If we are to assume our responsibility as physicians in this direction, is it not primarily incumbent on us to formulate and mobilize our individual conception into an organic movement with a definite program? Education and stimulation of the individual physician is indispensable to the ultimate administration of our professional duty. Combination and accord in the matters of the profession is fundamental to large and influential impression of the situation. The American medical profession is far more closely knit into a coherent and effective body than is usually recognized. Few physicians outside of the circle of administration realize the extent of our organization and diversity of our activities.

The most serious default hitherto has resided in the

fact that our activities have been unrelated and uncontinuous. Only recently an effort has been made by the American Medical Association to correct its deficiencies. Three years ago there was created by the National House of Delegates a council designated as the Council on Health and Public Instruction. The purpose of this act was to combine and correlate under a small executive body, which for the purpose of effectiveness was confined to five members, the activities of the profession which relate to the spread of intelligence amongst the people at large on all of the topics toward which the medical profession can be regarded as having specific responsibility.

For something more than two years this Council has been organized and in operation. Realizing its responsibility, it has undertaken to survey the field of its possible activities with care. There is a desire and purpose to move only on lines which can be regarded as sound, and to move no more rapidly than is consistent with stable construction.

Imbued from the outset with the belief that it is only possible to build effectively and valuably by building for the future, it early foresaw and accepted its responsibility for child culture. It saw, however, fully as clearly that to attack child culture as an isolated proposition was to attempt to fly to the goal without traversing the path. More and more it becomes evident that movement to this goal must be the movement of a social army clearly directed and thoroughly coördinated and approximately abreast in the advance of its various divisions.

Such an army is not made up of children, or of reformers, or philanthropists, or sociologists. It is made up of all people, and progress involves the conception of a mass acting intelligently and coherently.

Whereas all great movements and their leaders have seen clearly the need for coördinated activity, the practical difficulties in establishing such correlation are many.

Lack of widespread membership and interest in any group dealing with sociologic matters is perhaps the most serious barrier to consistent and continuous progress. Of all groups in the country at all related hereto, the medical profession is in the strongest position with reference to its membership, organization, and unity of thought.

Aside from our specific fitness as physicians for this sociologic adventure, our size and organization afford abundant reason for us to assume this leadership. This Council of the American Medical Association, therefore, has essayed a program which it believes is entitled to consideration.

In approaching this question and viewing the field at large, there are several important facts that lie at the foundation of its consideration.

Besides great size, this country has great complexity of organization, and a question which involves to any extent official action combined with popular action becomes very involved.

The Council has undertaken, first, to determine its relation to the national activities directed toward protection of public health.

At the outset this situation must be admitted to be extremely unsatisfactory. Although the Public Health Service of the United States, so far as it goes in its activity, is second to none, and perhaps better than any in the world, there are features involved which are far from ideal. This is true in three directions—with reference to its scope, its autonomy, and its standing as a governmental function. Related and distinctly cognate functions are scattered through various branches of administration. The Health Service, so designated, is distinctly improperly placed in its administrative relations, and instead of being a prime function of the government, second to none in importance, it has received scanty recognition as a public service.

The Council feels that there should be a Department of Public Health as independent as any governmental department, with its representative in the cabinet. That this must be the ultimate outcome we can scarcely doubt, but the time seems to be very indefinite for its achievement.

It is a matter for distinct congratulation, however, that the Health Service of the country stands in an attitude of deep sympathy and earnest desire to coöperate with all forces, for the furtherance of public health, and consequently pending the time of a proper disposition of the matter the Council is directing its energies to establishing and harmonizing working relations with Public Health Service. Of still greater importance in this country, however, is the subject of the State health machinery.

Whereas, for the purpose of broad and coördinating activities, a national health service with power and standing is indispensable, it will always be true that for administrative purposes the boards of health of the respective States are the points of deepest significance and importance.

The survey of this field reveals that we are in this respect in a state most chaotic. Nobody to-day knows what the activities of this country, measured in these units, amount to. Nobody as yet knows what should be the typical State board of health. No agency at the moment is in position to utilize these units in a coördinate and efficient activity.

The Council has undertaken a painstaking and detailed study of this question. A trained sanitarian of the highest authority is about to make a personal study of every State board of health, under the auspices of the Council. The object of this investigation will be to discover existing facts; to investigate the work, the powers, the equipment, and the support of these independent agencies; if possible, to determine by scientific estimate the status of existing boards, and to formulate principles with reference to their organization and activities, which will amount to standard-

ization of State boards of health. We are convinced that the work which lies before the medical profession in this enterprise will outweigh by far all other public health investigations in importance and result.

Aside from strictly official health activities, there are, and probably always will be, in this country, widespread activities springing from private initiative and supported by popular labor and subscription. The importance of these achievements cannot be overestimated. The body of popular intelligence and impulse so created, furnishing background for administrative effort, is incalculably valuable. At the moment, however, the same confusion exists as to the foundation, purpose, and scope of these bodies. There are more than seventy-five national organizations promoted for the purpose of dealing with public health in some of its phases. Early in its experience the Council found itself dealing with most of these in some way or other. It became manifest that these bodies, independent in action and more or less differing in personal membership, were working to a large extent at cross purposes. The fact that nobody knows what organizations exist, what they are doing, or what their foundation, is eloquent.

No matter what their individual merits, it needs no argument to show that some comprehensive plan is necessary to meet this situation, and the Council during the last winter called a meeting in New York City, to which were invited the executive heads of more than sixty national organizations. This meeting was largely attended, and resulted in the formation of an executive committee, of which John M. Glenn, the Director of the Russell Sage Foundation, is chairman, which undertakes to determine a practical plan for coördinating, so far as may be, the activities of volunteer health organizations, and of terminating, if possible, the waste which must be involved in duplication on the one hand and neglect of certain territory on the other.

I call your attention to the enormous importance of this movement. When you consider the great volume of personal service that is rendered in these organizations, the vast sums of money raised for their support, you will agree that it is only a question of time when contributors, both of service and of money, are going to demand that somebody shall know what is being done, and that a comprehensive scheme shall exist looking toward effectiveness and the elimination of waste.

The Council feels that its purpose in this direction is worth strenuous effort. Although the foregoing questions are technically outside of the Council's immediate labors, there is such relation between those activities and its intrinsic labors as to make the establishment of proper conditions vital. With reference to its specific labors in the education of the public, it has a definite view and distinct lines of attack.

In recent years publicity is recognized not only as a proper but as an essential function of medical progress. Though the prejudice against personal exploitation in the press has been modified, only to an extent determined by obvious properties, the conviction is universal that the profession as a whole owes it to the public to illuminate the field of public health as broadly and as intensely as possible.

The press, and particularly the newspaper press, of the country furnishes the obvious medium of communication. The press is wise and properly suspicious of efforts to exploit personal interest by means of specious appeals to public interest. It is not only not suspicious, but highly appreciative of honest contribution to this end.

For more than two years the Council has been sending by mail every week to upward of five thousand newspapers a bulletin dealing with current important public health subjects. These bulletins are brief and authoritative. It has been a slow matter to convince the press of the inherent

quality and purpose of this bulletin. Gradually the press has come to see that there is no sinister purpose, no private interest, and no dangerous doctrine to be promulgated. Coincident with that realization has come enormous increase of the use which is made of the material which is furnished in these bulletins, and, more important, a far more satisfactory attitude toward the profession. There is reason to believe that, as an educative factor, this process will increase enormously in importance.

There is, however, a second educative effort which the Council approves. Human thought is highly responsive to personal leadership. Able and convincing speakers in public meetings have incalculable weight in molding public opinion. We have established a Speaker's Bureau under the Council, which is slowly growing in strength and facility.

At present about one hundred and thirty of the leading medical men and women of this country have volunteered to deliver from two to six lectures during the season, at points remotely located from their homes, on public health topics. This has been a volunteer labor. If the burden be not too great it is better by reason of being volunteer effort. The financial burden is only partially relieved. The Council pays the expenses of the speakers. The local body holding the meeting pays the expenses of the meeting, but our professional brethren give by far the greater part—their time and effort. Though this movement is in embryo, it is hoped that it will grow into a massive force.

The Council is preparing also, through the employment of experts, a series of pamphlets on public health questions largely in need of elucidation. These are prepared slowly, because of the importance of uttering nothing which is not authoritative and satisfactory in statement, but the volume of definite information for the use, not only of the speakers, but of the public at large, which can be so disseminated is almost unlimited.

In addition to the immediate work of the Council, there have been organized under this general supervision a large number of committees dealing with specific problems. These committees are made up of men who are both enthusiasts and experts and whose activities are coördinated rather than directed by the Council: the Committee for the Prevention of Blindness, for the Prevention of Cancer, for the Study of Electric Shock, and so on through the list. Through the Council, these committees and the American Medical Association form a sympathetic bond of purpose with non-professional forces in the community.

The foregoing sketch of the plans of the Council will serve to indicate not only the comprehensiveness of the problem, but the further fact that popular understanding and education in this field, as in every other, is fundamental to organic law.

Much that is now being done will ultimately be done through wise and simplifying legislation. Of all phases of public health work hitherto, legislation has been the most bungling. Well-intentioned, ill-considered, immature, and ineffective law is the bane of this situation.

The Council has established a Medicolegal Bureau, in charge of which is a trained lawyer, the function of which is to study all the existing law in this country and others. Out of this study it is hoped it will be possible to draft model laws dealing with the public welfare.

This can not be properly done without medical oversight. It can not be properly done with medical contribution alone. In order to treat this matter adequately, the medical point of view, the legal point of view, and the sociologic point of view must actually be common. It is, therefore, hoped that out of the studies which our bureau is making may be developed policies of action which the trustworthy forces of this country may definitely promote and execute.

The House of Delegates of the American Medical

Association has clearly enunciated the principle that the medical profession is under obligation to further proper legislative enactment. As clearly it has declared that its function is educative rather than political.

If I were challenged by the query, What has all this public education to do with child culture? I would answer, Everything.

We cannot mold the future on criticism. We cannot engraft desirable civilization on a dead trunk. It is impossible to educate, rear, and perfect our children without the intelligent coöperation of the present generation. The more intensely we see our duty to posterity, the more profoundly we feel the limitations of contemporary conditions.

Never was there a time more ripe for achievement. The country is eager for constructive advance. The national administration is fully sympathetic. The time is here for sane, practical legislation.

The people specifically fitted must direct this work. Has the medical profession, with its long history, its fine tradition, its unparalleled progress, a higher aspiration? With its intimate contact, its insight and its missionary character, has it any greater opportunity?

We need only conviction and solidarity. Have we not a right to assume that the profession demands of its organizations constructive leadership to this end?

Delivered, First National Conference on Race Betterment, Battle Creek,
Mich., January 8-12, 1914.
Printed, Special Report.

THE NATIONAL DEPARTMENT OF HEALTH

IN discussing the proposition of a National Department of Health before this Conference, I assume that it is unnecessary to occupy any time in presenting arguments for the necessity or importance of such an addition to the Executive Department of the Government. It is equally unnecessary to present arguments in justification of this movement or in refutation of the objections and criticisms which have been advanced by its opponents, or to devote any time to the discussion of a bureau versus a department, or to the exact details of organization or of subdivision of such a department.

As the chairman of the Council on Health and Public Instruction of the American Medical Association, the only justification for my appearance on the program on this subject is to present the attitude of the organized medical profession. On this subject there is not and never has been the slightest uncertainty. When the records of the American Medical Association for the past sixty years are reviewed critically, one can not but be impressed by the remarkable unity of purpose which has characterized the profession through successive generations. The first important point, therefore, to which I wish to call your attention is that the American Medical Association, as representing the scientific medical profession of the United States, has throughout its entire history stood uncompromisingly and unequivocally for a National Department of Health as a part of the executive branch of government. The first mention of such a plan appears in the proceedings of the American Medical Association for 1871, shortly after the organization of State boards of health in Massachusetts and California, the proposal first

taking the form of a voluntary council made up of representatives from the various State boards of health. In the following year, however, a resolution was presented, asking Congress to establish a National Sanitary Bureau. In 1873, the president of the Association stated that a bill for this purpose had recently been introduced into Congress. In 1874 the question was discussed by the chairman of the section on State Medicine under the title "The Waste of Life," in which most of the subjects which would now be regarded as coming under the conservation of human vitality were considered and the organization of State and national departments of health was urged. During the following years discussion of the questions continued, and various bills were introduced in Congress, culminating, in 1879, in the adoption of a bill introduced by Mr. McGowan, of Michigan, establishing a National Board of Health, one of the duties of which was to report to Congress a plan for a National Health Organization. This board, for various reasons, failed to take advantage of its opportunities and, in 1883, went out of existence, through the failure of Congress to make any appropriation for its maintenance. In 1886 a bill was introduced in the House of Representatives by Hon. Robert T. Davis, of Massachusetts, providing for a Bureau of Public Health in the Department of the Interior. In 1891 a bill was introduced in the Lower House providing a Department of Public Health to include the Marine Hospital Service, the Bureau of Education, the Divisions of Vital Statistics, Animal Diseases, and the Weather Bureau. In 1892 a bill was introduced in the Senate by Hon. John Sherman, of Ohio, and in the House of Representatives by Hon. John A. Colwell. In 1897, what later came to be known as the Spooner Bill, was introduced in the Senate by Senator Spooner, of Wisconsin, and in the House of Representatives by Mr. Otjen. None of these bills went further than the committee stage. At the 1907 session of the American Medical Association, the Committee on

Medical Legislation reported that a preliminary draft of a bill creating a National Department of Health had been drawn up by Doctor Barshfeld, a member of the Lower House from Pennsylvania; that the American Association for the Advancement of Science had created a Committee of One Hundred on National Health to consider methods for establishing a National Department of Health; that the draft of Doctor Barshfeld's bill had been turned over to Professor Irving Fisher, President of the Committee of One Hundred, in order that it might be redrafted by some legal member of that Committee. The Reference Committee recommended and the Association voted that the details of the plan be left to the Committee of One Hundred, to which the Association pledged its support.

There was no further agitation on the subject until Feb. 10, 1910, when Robert L. Owen, Senator from Oklahoma, introduced into the United States Senate, Senate Bill 6049. This bill, the original Owen bill, provided for a Department of Public Health, under the supervision of a Secretary of Public Health, who should be a member of the cabinet. In this department should be assembled all divisions and bureaus belonging to any department, except the Department of War and the Department of the Navy, affecting the medical, surgical, biologic, and sanitary services, including the Public Health and Marine Hospital Service, the Revenue Cutter Service, the Medical Staff of the Pension Office, Indian Bureau, Department of the Interior, Old Soldiers' Homes, Government Hospitals for the Insane and the Freedmen's Hospital, the Bureaus of Entomology, Chemistry, and Animal Industry of the Department of Agriculture, the hospitals of the Immigration Bureau of the Department of Commerce and Labor, the Emergency Service of the Government Printing Office, and all other agencies in the United States Government for the protection of human or animal life. This bill undertook the organization of a Department of Health by assembling existing parts of the government

machinery in a new department, instead of creating a department *de novo*. The Department of Public Health was given jurisdiction over all matters within the control of the federal government relating to human or animal health and life. The establishment of bureaus of biology, chemistry, veterinary service, and sanitary engineering was authorized. This bill was referred to the Senate Committee on Public Health and National Quarantine, before which were held during the year following its introduction a large number of hearings. It was never reported on, and died in committee with the expiration of the Sixty-first Congress.

The Second Owen bill (S. B. 1) was introduced by Senator Owen, April 6, 1911. This bill provided for a Department of Health, presided over by a Director of Health and an assistant to be known as the Commissioner of Health, both to be appointed by the President. The commissioner was required to be a skilled sanitarian. The director was to be an executive officer. The Department of Health was to foster and promote all matters pertaining to the conservation of public health, and to collect and disseminate information relating thereto. It was expressly provided that this department should not exercise any function belonging to a State without express invitation from the governor of the State, or enter any premises in any State without the consent of the owner or occupant thereof. These two provisos were to meet the objections of the advocates of State Rights and personal liberty. To this department were to be transferred the Public Health and Marine Hospital Service from the Department of the Treasury, from the Department of Agriculture that part of the Bureau of Chemistry charged with the administration of the Food and Drugs Act, and from the Department of Commerce and Labor the Division of Vital Statistics of the Bureau of the Census. The President was authorized to transfer at any time, either in whole or in part, any bureau or division of the government engaged in work

pertaining to public health, except the Medical Department of the Army and the Bureau of Medicine and Surgery of the Navy. Provision was made for the organization of the following bureaus: Sanitary Research, Child Hygiene, Vital Statistics and Publications, Foods and Drugs, Quarantine, Sanitary Engineering, Government Hospitals and Personnel and Accounts. An advisory board of seven was provided for, and provisions were made for coöperation with the health authorities in the various States.

This bill was referred to the Senate Committee on Public Health and National Quarantine, where it remained for almost a year, at the end of which time it was reported on favorably, but with amendments that practically amounted to a new bill. As reported out of the committee, April 13, 1912, the bill provided for an independent establishment known as the United States Public Health Service, with a Director of Health as the head. Under the director were to be three assistants known as commissioners of health, two of whom were to be skilled sanitarians and one a skilled statistician. The present heads of the Public Health Service, the Bureau of Chemistry, and the Division of Vital Statistics were constituted the three commissioners. The duties of this health service were practically the same as those in the previous bill, with the proviso that the health service should have no power to regulate the practice of medicine or to interfere with the right of any citizen to employ the practitioner of his choice, and that all appointments should be made without discrimination in favor of or against any school of medicine or healing. These restrictions were inserted in order to meet the objections of those who thought that the liberty of the individual in selecting his medical attendant would be interfered with. The bureaus created were slightly different from those in the preceding bill, being bureaus of the Public Health Service, Foods and Drugs, Vital Statistics, Child Conservation, Sanitary Engineering, Personnel and Accounts, and Publications.

Following the report of the committee, April 13, 1912, the bill was placed on the Senate calendar as Calendar No. 561, where it remained until February 3, 1913, when it was called up, on motion of Senator Owen that the Senate proceed to the consideration of this bill. On this motion the vote was a tie, 33 to 33. The bill was, accordingly, not taken up, and died at the expiration of the Sixty-second Congress.

April 7, 1913, in the opening sessions of the Sixty-third Congress, Senator Owen introduced, as Senate Bill 1, a third bill. This bill was referred to the Senate Committee on Public Health and National Quarantine.

In the light of this record I feel justified in advancing the following propositions as generally accepted:

1. The necessity of some central federal health organization is agreed upon by all those familiar with the situation.
2. While recognizing the paramount importance of State activities, owing to our existing form of government, the importance of federal activities can not be overestimated.
3. The initiative of the present movement is largely due to the activity of the American Association for the Advancement of Science in the organization of the Committee of One Hundred, which movement has been, from its beginning, indorsed and supported by the American Medical Association.
4. The American Medical Association is and always has been fully committed, by its repeatedly expressed opinion and official records, to the support of a National Department of Health.

While the direct results secured by the efforts of the past forty years may not be entirely gratifying to the friends of this movement, the indirect or reflex effect of the continued agitation for better public health organization has been the stimulation of public health functions, both of the federal government and of the various States. It is safe to say that the present United States Public Health Service

would never have reached the present state of effectiveness without the stimulation of the agitation and discussion of this question which has been carried on. Organized in 1789, there was very little change in its function or activities for nearly one hundred years, its work being limited to the care of the sailors of the Merchant Marine. In 1871 Congress placed the supervision of national quarantine in the hands of the Service. In 1899 the name was changed to the United States Public Health and Marine Hospital Service. The medical service was reorganized, the hygiene laboratories were established, and in 1912 the name was again changed to the United States Public Health Service, and the medical officers were placed on the same basis as those of the Army and Navy and the functions of the Bureau were considerably widened.

The part which the American Medical Association has taken in the campaigns and discussions of the past four years is too well known to require recital.

Following the advent of the new administration and the calling of a special session of Congress in April, 1913 a conference was held in Washington on Monday, May 5, attended by the Council on Health and Public Instruction, and the Special Committee on National Health Legislation of the American Medical Association and the Executive Committee of the Committee of One Hundred of the American Association for the Advancement of Science. After protracted discussion, Professor Fisher formulated a program which was unanimously adopted. This program included the following points:

1. Appoint a committee to see President Wilson tomorrow, May 6, at 10:45, and communicate to him the results of our conference and request him to decide upon an administration policy concerning public health legislation.
2. Recommend to President Wilson that he definitely advocate the establishment of a Department of Health.
3. Recommend that the President coöperate with Representative Foster in attempting to secure a Committee

on Public Health in the House of Representatives during the present special session.

4. Recommend that the President call a White House Conference on Public Health next fall somewhat similar to the Governors' Conference on Conservation called by President Roosevelt. The object of this conference is to promote the success of the President's policies and if necessary to aid in framing these policies.

5. That at the next regular session the President should send a special message favoring public health legislation or else emphasize it in his regular annual message.

6. That the President should select for the first assistant Secretary of the Treasury someone interested in public health.

7. That in the next regular session we should support the President in securing such public health legislation as he decides to recommend.

I call your attention to the fact that the program adopted by the representatives of the American Medical Association and the American Association for the Advancement of Science pledged these two bodies to the support of such a program for public health legislation as President Wilson may see fit to recommend at the next regular session of Congress, and that the record so far established by President Wilson, in securing from Congress advanced and constructive legislation in accordance with a definite policy, justifies the conviction that when this subject is next taken up in Congress, it will be as an administration measure, having the support of the dominant party in both Houses of Congress and the approval of the general public. In the meantime and in anticipation of such a situation, the Council of the American Medical Association is going steadily forward in its campaign of public education on health topics, recognizing the fact that an active and intelligent public interest and support is of the first necessity in securing the establishment of this Department of Health, for which the Association has steadfastly stood during its entire existence.

Delivered before the Industrial Committee, Chicago Association of Commerce, March 12, 1915.

HEALTH AND ITS RELATION TO BUSINESS

THE question of health and its relation to business constantly receives more attention and is seen to have more significance. By and large, the variable quantity in business efficiency represented by the actual and potential health of industrial masses is tremendous.

Although the ethical motive for promoting Public Health is not primarily for the sake of business, indirectly and essentially, public weal and business efficiency are inseparable.

Public Health activities for the most part concern themselves with mass conditions. The efforts to establish and maintain general conditions which shall make possible the maintenance of individual health are world-wide. This is not purely altruistic. It arises out of the fact that just in proportion as the density of population increases, the difficulty of individual self-protection accordingly is magnified. The State undertakes to protect those who are in the nature of the case unable to protect themselves. As society becomes more complex, this function becomes broader. The future will see a degree of cognizance and surveillance over health matters hitherto unapproached.

The question to which we address ourselves to-day is, however, a question of individual health, which lies quite outside the territory of State regulation, and yet of course is inevitably modified by it. In so far as individual conceptions form and crystallize, they reflect strongly through public sentiment upon the mass movement. We are vague in our understanding of the term, health.

Any group of a hundred men, moving along together in society, will go through a period of reasonable life

expectancy, apparently on equal terms. Closer analysis, however, will show that between the ages of 20 and 30 a certain number will drop out from causes more or less related to that period of life; between 30 and 40, others will fall by the way; between 40 and 50, still others; and between 50 and 60 there will be a grand try-out of the fit and unfit, until the advent of what may be called "old age," when only a remnant will survive and be found to be in first-class condition.

The question will always arise as to how necessary this diminution in the ranks may be. How many of the causes leading to this situation are avoidable and correctable? To what extent is this condition due to mass conditions. To what extent is it due to individual habit? Even with regard to the individual who has reached advanced age in good condition, is there any doubt as to his having summed up a greater usefulness and happiness in his career?

This involves some discussion of the nature of our physical deteriorations. Most of them are due, to a large extent, to improper habits operating through a long period of years. The difficulty in educating people to an appreciation of this fact is, for the most part, due to the fact that untoward results are separated from their causes by a lapse of time so great as to quite obscure the consciousness of cause and effect. It is a fair question, Is a man in perfect physical condition a more effective factor in business than a man who is not so perfect?

It is not easy to generalize about this, and yet close analysis of the matter, from the standpoint of a physician dealing with all conditions and all ages, leads to the conclusion that the benefits of wise living are not only manifested in a longer life, but concurrently, in the happiness, comfort, and effectiveness of daily life.

Health as such is hardly to be pursued except as it is something which can be used and used freely. Merely

to be well, without reference to what one does with his ability, is not very interesting. Keeping well through intelligent and thoughtful habits is largely a question of personal discipline. It is far less a question of what one does than what one does not do. Hygienic living is largely a question of self-denial in various directions. It is one of the clearest illustrations of the thought, "Liberty through discipline."

The personal values inherent in and resulting from self-discipline are immeasurable. Out of this comes not only reasonable health but power, which from a business man's standpoint cannot fail to show in his vision, courage, and endurance.

Delivered, Twenty-first Annual Convention of the National League of Nursing Education, San Francisco, June, 1915.

Printed, *American Journal of Nursing*, January, 1916.

WHAT THE MEDICAL PROFESSION CAN CONTRIBUTE TO NURSING EDUCATION

LADIES, graduates, undergraduates, and mere men: It is a great pleasure to be here, and in any case I have been so well brought up in hospitals that when a head nurse tells me to do a thing I do it. But apart from that acquiescence, my acceptance of the invitation to speak here to-day is an essential gratification to me in being able to come and express the feelings which I have long held upon the question you are considering. I have had large experience with the training of nurses in a way, and through the years which that experience has covered I have been very conscious that there was a distinct lack in the contribution made by the medical profession to the education of nurses. I realize, as your President says, that if it had not been for the medical profession the education of nurses would have been meager, and halting, and difficult; on the other hand, as compared with the contribution the medical profession might have made, what it has made is meager. When you come to consider the relationship between the nursing body and the medical body, you see at once that there is a relationship of interdependence so close as to be practically unique in human affairs. Of course before there were trained nurses, there was a practice of medicine, such as it was. When I say, "such as it was," I mean all that those words convey. The practice of medicine, whether in public or private, to-day, is not what it was before the day of trained nurses.

It so happens that there is an almost exact coincidence between modern medicine and trained nurses. The trained nurses began in the late seventies, and modern medicine

began then. So far as the necessity of the nurse was concerned it was absolutely dependent upon the new thought of medicine, and the progress of that new thought in medicine was absolutely dependent upon the evolution of an adequate trained nurse, so this interdependence is so great that it is inconceivable that there could be any lack of interest in the medical profession in the development of the nursing profession. In the hospital and in public I have often said, and now repeat, that a hospital is not made by its medical staff—it is made by its training school. In the long run it is, and will be, exactly in correspondence with the quality of its training school.

Yet what have we, as physicians, done about it? In many ways we have done a good deal, but the fact is we have for the most part depended on having the education of the nurses done for us, and what have we contributed? Criticism, not unfriendly criticism, not captious criticism necessarily, but it has been criticism. Nurses have been furnished us, have been utilized, and have been educated and improved undoubtedly through the process of criticism, but it has been essentially negative so far as we have put anything into it. In contrast to that, what could we have done? We might have furnished a constructive program, a constructive contribution of some kind.

What do I mean by that? Of all the words used to juggle and to conjure with, the word "constructive" is perhaps the easiest and most effective. What does anybody mean by the word "constructive" with reference to the question of the education of nurses? I am not sure that I know, but I am going to try and analyze it and see what we do, or might mean. Let us stop and consider the evolution of the nurse from the time she begins as a little girl to think of what she is going to do, up to the time when she goes ahead and does it. Fortunately, most nurses go into nursing for the sake of a job, or not because they are called or have a mission, simply because it is a

practical way of getting education and an independent living. It is fundamentally an economic proposition with the great majority.

Why do I say, fortunately? Because the foundation upon which a girl could make that choice as a matter of mission would be a foundation so insecure, so lacking in knowledge and intelligence about it, that she would be almost sure to make a mistake if she went in with the idea of being called, or with the thought of sentiment. I do not decry that, but I realize that in the nature of things a girl can not know what she is talking about, or thinking about, so fortunately girls do not go in because they are called, but because they want some way to earn a living. On the other hand, the question before us, as trainers of nurses (and I include myself in this, because I am doing what mite I can in training schools) the question is, shall that experience that this young girl has in the training school, be and remain a simple economic proposition, the simple acquiring of a job in a skilled trade, or shall it develop under the experience, under the light which may be shed upon it, under the gradual evolution of the great human aspect of the situation—shall it be made to develop into a mission in the end? That is a very different proposition. I do not care to see the nurse go into training because she feels it is her mission. I do feel that the only way she can go out and adequately justify the situation is with the conviction that she has a mission. You see perfectly well what I mean by that—the transfer from the mere natural in-going into a mode of livelihood, under the great light and warmth and inspiration of the situation, should be a highly ethical production, and there is all the difference in the world between the two situations. And that is the thing that we as doctors must strive for. Do we do it? Are we successful in that effort? In the very nature of things, no, not in general, not universally; and, in the very nature of things,

yes, very often with reference to particular individuals. But after all, are we getting as large a measure of that spiritual quality in our graduates as the situation justifies and demands? I think not. I am not here to say why, exactly, because to do that would mean going too far afield. I simply want to call attention to the situation, but you see, as I outlined this thing, how the term "constructive" begins to find a scope. There is plenty that can be done along this line of creating an atmosphere, of creating a trend of thought, of creating an interpretation of life. There is obviously a great deal that is constructive, that can be done by somebody, whoever the right somebody may be.

As to the make-up of a nurse, what shall it be? I do not want to stop to-day to discuss a lot of detail about qualifications or educational qualities, but I believe they should be good enough and high enough, whatever the level may be found to be, and that the same caution should be used in making the standards, that must be exercised in the medical profession; that is, that standards be not made too high. In the medical profession we came near fixing them too high and had to go back. Do not do that! As a general rule, a high school standard seems to me a pretty good one. I have seen girls with not very much education, that I knew would do well, and girls with very little education, that I knew it would be a crime to hold back. But, on the whole, I would say we must have a preliminary educational qualification of considerable consequence, and why? Not because it represents any particular measure of knowledge that this candidate has, or that we want this candidate to have, but because for the most part it is the index of aspiration, and it is the aspiration, not the particular modicum of knowledge that anybody may have, that is valuable.

Secondly, although I realize the importance for practical administrative purposes of preliminary educational

qualifications, and am willing to agree to whatever standard the nursing profession sets, I am not willing to make it a crucial qualification. It is a matter for the exercise of the wisest judgment and common sense. On the other hand, there is something we want nurses to have before we get through, no matter where they stop, and that is very difficult for me to state. We want nurses to have a point of view, and orientation if you like, of themselves, with reference to all the problems of life. Well, you say, everybody ought to have that. True, but the nurse more than any other person, except the physician. They are the two people who need a certain understanding, a social orientation above all others, that will enable them to know what their own relationship is to the great human problems of life. Now there is where we fail, and I do not know but that it is inevitable that we fail. I do not know whether we can ever do it, but I know we want to produce in our graduate nurses a social consciousness that will put them in the place where they belong, with reference to the great privileges and obligations which surround them.

And how are we going to do it? What do we want of them? Why do I put such emphasis on this question of social orientation?

Well, remember, that there is a time in the affairs of men, women, and children when there is access to the inner citadel more pronounced, more vulnerable, than at any other time, and that is during the prevalence of trouble, of sorrow, of sickness, of pain, of death, or whatever may be involved in all these things. There is a time when all humanity has its guards down, and that is the time of contact between the physician and the trained nurse and the people.

Now, because of that time, because of that contact, and because of that opportunity, there is a resultant factor, and that is obligation. Because we have that opportunity

it is absolutely up to us to meet it. And it is that thing that is so hard to bring to nurses, and no harder to bring to them than to physicians, and it is that thing that is absolutely necessary in order fully to round out this educational proposition. We have to teach our nurses that, because of the peculiarities of their professional relations, there is an opportunity and a function of leadership, influence, pressure, whatever it may be, an opportunity to be peculiarly influential with people. Nurses do not begin to see that line of differentiation between themselves and ordinary people, but it is there, a line of differentiation between them and everybody else, except the physician, and it is something well worth while teaching them, well worth trying to make them realize, that their very status in the community involves certain obligations and certain limitations that do not belong to other people. That is what I mean by the point of view that we want to bring to them.

What is leadership? They cannot go out as young girls fresh from the hospital, and be pronounced leaders right off. I am not stopping to argue the question here, of preparing our girls for social work. I do not want every graduate nurse to be an expert social service nurse; we have to make our selection for that. I do not want every nurse to know the technique of social service; I would like her to know the *lingo*, I would like her to know the purpose and quality of the social service worker, but I am not arguing for making every nurse a social service worker.

No young girl goes out from graduation with any of these qualities strongly developed that are going to make her a leader, yet she is in the position for leadership, and has a perfectly definite moral function looking thereto.

What is her next step? To me this is the crux of the whole situation: the continuation of her education, the continuation of her study, of her effort to improve herself

and make out of herself in her ultimate form something which is merely indicated to her in her earlier course, and which, unless developed, leaves her merely a skilled worker, and not a member of a profession.

That is the thing in which we find the great failure in this whole situation. Nurses do not go on, they do not study, they do not work, they do not strive to develop themselves, and thereby raise themselves from the point of being merely members of a skilled trade to the standpoint of a learned profession. It is not within the power of anybody to bring that to pass, except with the nurses themselves, with such help as we can give, ever looking toward it.

This brings me to another question. Perhaps you thought I never was going to get to it. What can the medical profession contribute to this educational process?

Let me say to you earnestly, without complacency, and with humility, that the first thing we can contribute to this situation is to put our own house in order. There is not anyone who knows that better than you do. That is the first step in the proposition so far as strengthening, amalgamating, and adding quality to the relationship between the medical and nursing professions is concerned. That is not said in any carping spirit. I am not blaming us any more than I am blaming you. The point is, we are not in a position in reference to these questions, namely, point of view, social consciousness, and continuous development and aspiration, to say that we are in any much better situation than you. The first thing for us to do is to admit that, and get to work to straighten it out.

I can not take time to discuss the features of that. It simply means that everything I have said with reference to the trained nurse is still more true with reference to the medical profession. Everything I have stated as a desideratum in the trained nurse is still more so in the case of the physician.

Now the question is, if we can clear up our own territory, if we can clean our own house and get things right, what contribution can we make to you? What assistance can we be to you in the situation? Of course that is rather a large question. There is no end of indirect assistance we can give, no end of positive, affirmative, and negative things we can do that will be helpful. It would involve a discussion of relationship between the two professions to really deal with that.

The thing that I want to talk about, just for a minute in closing, is this: In my opinion, it is the bounden duty of the medical profession in its best ranks, in its strongest pedagogic individuals, in its men of largest influence, to participate actively in the formal education of nurses. That sounds as though I were simply appreciating something already existing. It does not exist. Who are called on to deliver lectures to the nurses in training schools? The internes, the fellows just out of school, the smart young fellows who are good assistants, clever, able young fellows, whose interpretation of the situation is worth very little. I am not trying to underestimate my young colleagues, but to make a picture out of which I draw the conclusion, that it is the bounden duty of the strongest, most experienced, and most philosophical men in the medical profession, to participate in the teaching of nurses in any direction in which their contribution is more valuable than the perfunctory contribution of somebody else. I do not know how that is to be accomplished. The head men are busy. They do not like to do it, they have not the time, and I don't know but that it is a little *infra dig* to go out and lecture to nurses if you are the top man in the profession. Maybe it is, I don't know, but it has got to be reformed in some way, because the things we have to offer as the result of years of experience and thought and elimination and general interpretation, are the things that only the older and more experienced practitioners

have, and these are the things that are necessary to give to our nurses; and if we can not get these things from such men, we can not get them at all.

I am making my statement of belief to you educators of nurses that our greatest contribution comes in forgetting our convenience and giving ourselves as freely as may be asked for the benefit of this general need.

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THE PUBLIC AND THE MEDICAL PROFESSION, A SQUARE DEAL

WHEN "Ian MacLaren" in his delightful book, "Beside the Bonnie Brier Bush," portrayed William McClure, a country doctor, he drew a picture that deserves to endure as long as there is literature. Therein he portrayed a situation which is elemental in human relations and described a man uncouth of person, brusque of manner, and of uncompromising honesty in his dealings with his fellows. Against this stern picture shows the tenderness and sympathy of a woman and the courage of a Scot. In this picture, moreover, the relation of the doctor to his patient is for the most part implied and very little described. The story derives impressiveness in the portrayal of the doctor as related to his circle. It is in the reaction of his fellows to his personality that the deep lesson is to be learned from this picture. The character may well stand as the prototype of a factor in human affairs, of deep significance.

The relation of the doctor to the setting in which he finds himself can be one of the greatest or one of the meanest relations occurring in human affairs.

At its best it is inspired. Here is the friend in the hour of most poignant need; the strong arm at the time when the strongest become weak; the clear vision in the pathway obscured by tears. Is this story told with too much sentiment? Consider the thousand eyes that have dimmed in its perusal, the thousand throats that have choked and the voices that have wavered in trying to read it. The emotions which it awakens and the response that it evokes show better than argument that there are depths in the situation

and values in the relationship that are not lightly to be put aside or scornfully analyzed. There is here a function, important fully to realize and cling to. Where it stands in the great problem of medical affairs we may hope to see, but whatever our conclusion may be, we are justified in believing that there is a something fundamental. All of our conceptions of the nobility of the medical profession, as distinguished from its characteristics as a trade, are bound up in the intricacies of this relationship.

In more recent years there has appeared a work probably more widely read, certainly more vigorously discussed, a play, "The Doctor's Dilemma." This play and its preface constitute the most vicious attack, of any intelligent character, ever made upon the medical profession. First and last in this utterance there is painted with ability, and yet without fidelity, all the monstrosity which could be evolved from deliberate perversion of medical science and professional opportunity. It is distinctly a horrid picture. It is drawn with the license of a satirist, pungent, exaggerated, and misleading. From the standpoint of a satirist this attack is probably not as venomous as it appears. Doubtless there is a measure of ethical purpose in the work. That it is utterly unfair as a statement of fact is perhaps less grievous considering the unfairness of the author's similar attacks upon most social institutions. Possibly the function of satire is to overshoot in order that the fireworks may be more conspicuous.

The reception of this play of George Bernard Shaw is curiously various. Those who are disposed to idealize the medical profession show a deep resentment. Those who are disposed to anathematize the profession display a gleeful acquiescence. Those who are disposed calmly, fairly, and intelligently to weigh the matter recognize in this unpleasant picture elements of significance, the exact degree of untruth in the description of which is less important than a realization that herein lie matters crucial to the whole medical relation.

The earlier picture to which I refer leaves a sense of warmth, comfort, and general ennobling. The latter leaves only a bad taste. Nevertheless, it is imperative to review the whole matter as judicially as possible and to face the facts as clearly defined as they may be.

To those of us who know the real merit of the medical profession and have an abiding faith in its function and its future, it is still a duty calmly to consider what the purveyor of half truths, undigested science, flippant travesty, may utter that is worthy of consideration.

It needs no attack upon the medical profession nor analysis of such attack to bring us into the attitude which we should occupy upon this question. It is imperative that we scrutinize our situation and determine the following things: What are the values in medical science? Whither is the trend of the profession? Wherein are we open to serious criticism?

I need hardly declare that within the limits of this address the answers to these questions can be only suggested. To all who have been anxiously reflecting upon the matter it is very clear that the practice of medicine is fraught with many perils, fully commensurate with its intrinsic difficulties. Through all time those who have felt it incumbent upon them to keep alight the torch of professional integrity have realized the pitfalls which beset the path of the medical practitioner.

Some thirty-five years ago there was published a book, ostensibly for the guidance of practitioners, particularly the young. With great skill there was set forth the ways and means of practice and the ins and outs of medical relations. With distinct acumen was discussed the psychology of the sick and the well, and the various devices whereby physicians could successfully manage the conduct of their professional relations. To the uninitiated it was an impressive book. It had an enormous sale and was often enthusiastically endorsed by medical men. To my youthful

mind, as I recall it at that time, it seemed to embody great wisdom.

I read this book aloud to my preceptor, my father, and at the end he said, "It is the most vicious book ever presented to the young medical mind. It is a presentation of a systematic, organized scheme of medical claptrap and tends enormously to increase the inevitable and intrinsic pressure there is upon the young practitioner to be dishonest." At that point my eyes were opened, and from that time I have never been without a consciousness that it is only by the utmost exercise of self-criticism and judgment that dishonesty in the practice of medicine can be avoided. It is not only the most serious menace to the personal development and intellectual growth in the medical man, but it is the insidious, unseen, undermining influence which perpetually threatens the confidence that the public has in the profession upon which it so seriously depends.

The menace is augmented by the fact that so much of it is not deliberate or intentional; that it is so largely a reaction of expediency and bewildering perplexity; that it is so frequently carried on under the guise of mercifulness; and above all that it is so much unconscious in consequence of the fact that it springs from an intellectual dishonesty, or, more distinctly speaking, unclear thinking.

That there is in the profession a considerable volume of deliberate, self-seeking dishonesty is beyond question. That, however, is a minor matter as compared with the dishonesty of expediency or obtuseness. Deliberate crafty dishonesty of physicians is very much like dishonesty in other walks of life, to be dealt with drastically and without compromise.

Conventional dishonesty of professional dealing, which more than anything else is consequent upon a disposition to follow the line of least resistance, is of far greater significance and gravity. This is the field in which the eminently respectable, highly successful, intensely popular physician

can find his fullest scope without being personally challenged either by his neighbor or by himself. The results of his deviating are remote and indirect and largely detached from his personal relation. In the aggregate, however, they constitute the factor of instability in the structure of professional reliability and value.

By as much as the inherent tendency in medical relations invites, encourages, and in the eyes of some compels these compromises, by so much is the necessity emphasized for constant vigilance and careful self-estimation.

To a large extent this condition is determined by the fact that the public seeking the help of physicians entertains an exaggerated idea as to what physicians can accomplish. There are few relations in life, perhaps none, in which people's affairs are of such vital importance, with regard to which they have so little fundamental intelligence or opportunity to acquire knowledge.

It is characteristic of the workings of human minds to consider things which occur in sequence as being in a relation of cause and effect. It is a tremendous evidence of the general kindness of the public attitude that its judgments in medical matters are so one-sided. The fact that a physician earnestly participates in the conduct of a case of pneumonia leads the recipients of his attention to believe that a recovery is due to his skill. It is very rare that failure to recover is ascribed to his lack of skill. The public is noticeably biased in favor of the physicians who enter into its troubles. This illustration can be multiplied in a thousand directions. The result is not only that people expect of physicians determining influence in matters over which they have no influence, but that they attribute to medical skill myriads of fortunate events which have been practically uninfluenced either by skill or lack of skill.

Out of this attitude of mind on the part of the public, grows a tendency in the physician to pose as influential in the matter, very difficult to resist. When one stops to

consider how this mutual estimation may be elaborated, continued, and manipulated, it is evident that the inherent obstacles to establishing clearer relationships are very great. If to this be added on the part of the physician an intellectual defect, perhaps harshly called intellectual dishonesty, which leads him to participate in the flattering judgment as to his own skill or importance in the situation, the matter is vastly exaggerated. Beyond a doubt this confusion is a factor, in medical affairs, of tremendous weight.

The profession, by and large, is not thinking clearly as to its powers and limitations. It is participating in this misjudgment as to what it can do, and the result is in many directions that it is muddling along, failing clearly to discriminate as to the values inherent in its most earnest endeavor. Over and around it all lies the cloud of professional secrecy. In the nature of things the matters in question are tenaciously and sometimes sacredly private. The authoritative position of the man who gives advice, the extreme incapacity of the recipient of the advice to weigh it and judge it, the utter lack of expert discussion or of varying comment, tending to create the condition of the star chamber, tremendously add upon the one hand to obscurity, and on the other to indiscriminating opinion.

The question naturally arises as to why this misconception has so long continued, and how it is that, in spite of a considerable recognition of the facts, the relationship is maintained and the inevitable consequences ensue without material interruption. It would be an intricate analysis that could disentangle the conditions, far too elaborate for this occasion. In passing, however, it is worth while to comment upon the extremely varied character of matters that enter into the practice of medicine as it has developed. In the first place, are the matters of essential gravity, as acute diseases, more or less dangerous in character, actually matters of life and death? These constitute, of course, a small minority of the experiences of a physician, and yet

they are the point about which rally the deep intensities of the physician-patient relationship.

Here people's interests are most vital, anxieties most disturbing and dependence most pronounced. It is at this point that the physician establishes his indispensability, and it is with regard to service in these agonizing conditions that Watson's picture of "A Doctor of the Old School" is so effectively drawn. It is but natural that under those circumstances people with everything at stake and utterly helpless should turn with unlimited confidence to apparent sources of strength that are available.

It is here that the physician becomes most definitely the friend, and out of the glow of the situation comes a deep attachment made up of confidence, gratitude, and relief. It is but natural that an intellectual criticism of all factors in the case should be, in general, lacking. The situation is deeply human and far removed from the ground of scientific analysis. By the same token, the opportunity for service offered to the physician is of the greatest. It is in this territory that the rank and file of the profession shines, not as to professional achievement, but as to personal devotion and honest effort.

Inevitably, however, out of these very crises of life grow much of the misconception which we are herein discussing. The physician alone in this combination is able to judge how crucial his services may have been. Probably he less than any is able to judge how comforting his presence may have been. In spite of himself, in the end and in general, he will be credited with a larger function of specific achievement than he is entitled to. The simple question is, will he play upon that situation and capitalize those possibilities, or will he honestly and fairly place and maintain himself, as far as he is able, in his true relationship?

It is perfectly obvious that he may have been utterly devoted on the one hand and not clearly discriminating on the other. From time immemorial physicians have thought

that way; people have thought that way. Only just now have scientific corrections to such thought opened up the truth. Can we expect logical and ethical readjustments in a twinkling? This, however, I conceive to be the starting point of professional relationships, which go on and on, more or less intensifying a misconception which has arisen. A physician's experiences enlarge into a multitude of questions which have no such immediate serious import. He is consulted upon thousands of matters which he does not materially influence or which would not have been seriously compromised without his influence.

It is in this territory that great opportunity occurs for discriminating conduct. Assuming on his part a thorough intelligence as to the matter before him, the question is, will he hew to the line? Will he set before his patient the facts as he sees them? Will he dismiss without prescription a patient who is better without prescription? Will he minimize to the proper point the insignificant ailment? Will he tell to the unwilling listener, an unpleasant truth? Will he in the various doubts and uncertainties of the episode, always regard the interest of his patient as entitled to the benefit of the doubt? Will he avoid the temptation to get rid of a troublesome and not very important matter by some form of hocus-pocus? All these and more are daily issues confronting a physician.

There is no question that the best of physicians punctiliously regard all of these things. There is no question that the worst of physicians will violate all of them. But in between is the enormous mass of practitioners, neither the worst nor the best, who will need to discriminate according to their mental and moral endowments. It is utterly unfair to demand that all physicians shall be of such superior quality of mind and conscience as adequately to meet a situation in which all of the adjustments of a social confusion shall be met by them. It is utterly unintelligent to attribute abuses, which may have grown up in this

field, to deliberate or even conscious action on their part.

The matter is clearly a question of psychology in which lack of intelligence and information on the part of the non-medical public is by far the most important factor. It is no extenuation of compromise in these matters to say and to believe that people prefer to be fooled. In the first place, that is not true. In the second place, where it appears to be true it is because the process of being fooled carries with it satisfaction, which the physician should learn to anticipate, and neutralize by deeper and more vital contribution.

My function as a physician is not discharged when I say to a solicitous client, "There is nothing the matter with you," unless that opinion is fully accepted. And if my patient continues to believe there is something the matter with him, there *is* something the matter with him, and my function has not been fulfilled until I have made him see, as I see, that he is not in jeopardy.

Herein is the great failure of the clear seeing, outspoken physician who does not juggle the facts. Too often he is not willing or perhaps able to impress upon his patient to the point of practical conviction, the truth to himself so clear. He has relieved his conscience, perhaps, by an entirely upright expression. He has not rendered his full professional service until he has made it effective. It is quite clear, therefore, that physicians should assume and manipulate the various methods open to them for coping with all the difficulties herein implied. The solution of the matter lies in a two-fold progress.

What is needed to correct this maladjustment of medical service to popular need is better education. The public must be brought to see that ordinary ailments of life are not necessarily evidences of disease but are logical consequences, for the most part, of perverted habits of life. To any extent that the person not especially trained in physiology and hygiene can be taught sound habits, the public can be

brought in many ways and by an elaboration of methods now started in so many directions, to learn the conduct of life.

In order fully to realize the possibilities in this direction, it is necessary to inculcate a sound primary conception of health. In the past, people in general have been, toward health, in an attitude that is distinctly negative. The motive actuating people, where they are conscious of any motive at all, has been a desire to avoid illness. The trend of humanity has been altogether toward remedies for mal-condition. It is unusual that people consider the matter at all until attention is directed to it by some form of discomfort. It has been assumed that health is automatic and that no attention need be paid to it until some deviation occurs. This is fundamentally erroneous. The more society advances in what is called civilization and what is really complexity of relationships, the less the checks and balances of physical well-being operate automatically. The consequences of complex life, more dense aggregation, more intricate interrelationships, are for the most part not immediate, but remote. It is not easy to trace to fundamental cause many of the effects which present themselves as physical perversions.

The future demands that people direct their attention toward causes, and bring to bear upon themselves, with reference to causes, principles of conduct. This implies that desire to avoid sickness be translated into a determination to be in the highest degree well, which involves a scrutiny of the foundations of health and adoption of methods of life in keeping with their preservation.

This constitutes in contradistinction to what I have called a negative conception, an ideal of health which is distinctly affirmative. It is to this end that intelligent effort of people must be directed and along this path that they may hope to be guided by medical thought. Great as the need is in the public in general for such recast of

mind and purpose, the need is greater in the medical profession.

The most serious indictment of medical practice to-day is that it is superficial. Unless guidance of the public in this direction is to be left to sociologists, and amongst these, to enthusiasts, faddists, and blundering well-meaners, the medical profession must be not only better educated but differently educated. Not only is the profession not well trained in sanitary science, but it is still less well trained in the philosophy and principles of hygiene. It is unthinkable that a profession which has not devoted itself earnestly to a subject so intricate and widely ramified can have much value in leading the populace upon a safe road. It is inevitable that a profession so educated shall deal with effects rather than with causes and shall fail to discern and, whether disposed to shirk or not, shall be incompetent to point out the logical sequences which must be clearly comprehended in order to render service of any signal value.

From this point of view there are no trifling ailments in medical experience; there are no "unimportant" matters. That which makes the mass of physicians' problems insignificant, is that they are dealt with insignificantly. There is no so-called minor ailment which has not a major reasoning within it, and the test of a physician's ability will be his capacity to discern ultimate facts and, so far as may be, readjust conditions.

There is probably no part of this field demanding such acumen, patience, and breadth of view as mental hygiene. Not only are foundations to be laid better than now, but a larger comprehension of the relation of mental to physical and social life must be acquired. Failure to realize this and to incorporate, with the materials of physiological reform, the patient's mental contribution, is largely responsible for superficiality in our present method. Not only must we see, but our patient must see to the end before we have

accomplished much. In this ideal lies the hope of the profession.

As our confidence in medicinal therapeutics wanes, as our dissatisfaction with the detail of conventional practice grows, and as the trivialities of practice become more irksome, there opens before us a field unlimited in scope and attractiveness, the philosophy of health and its reflection in the physical, moral, and social life of the community. We are the proper guides to the public in this philosophy, but only can we be such by becoming competent. The one reliable counteragent to the disingenuousness and dishonesty of medical practice is better education of physicians.

What is the trend of the profession and of the public? Beyond a doubt there is a strong current running through the medical profession tending toward a solution of these difficulties. Coöperation between medical forces and the lay public is becoming marked. A reciprocal function in the progress of matters of public health is clearly recognized. To a very large extent this is due to the vision and devotion of sociologists. To a very large extent it is met and made effective by the organized policy of the medical profession. Those who are thoroughly familiar with the situation recognize a common ground upon which physicians and laymen meet with thorough recognition of their mutual dependence.

As this movement becomes more general, and dealing with health affairs, in the abstract and aggregate, progresses, the educational factor for the public and for the profession must be regarded as of the utmost importance.

The public is gradually learning facts, the profession is gradually learning its function, and side by side they are moving and destined to move toward enormous results. As barriers disappear between medical and non-medical activities, community of thought and interest becomes obvious. It is inevitable that the artificiality and superficiality of relations shall disappear in consequence, and there is reason

to hope that in the years to come the medical profession will assume an importance and render a service such as has never before been approached.

If I had time and this were the occasion to pay a tribute to sociologists in their efforts to advance the physical welfare of the community and race, it would be very grateful to me so to do. The vision and purpose shown by leaders in that group command admiration and compel support. In many directions initiative in social movements properly is theirs. As they have gone on outlining this territory they have markedly educated the medical profession. As they progress, however, they find themselves at every turn confronted by necessity for expert, scientific advice. That their need in this direction shall be met by free, full, and cordial contribution from the profession is earnestly to be hoped. It appears in the present trend of events that there can be no question about such deep and earnest coöperation.

The American Medical Association has definitely set its face in this direction and established a policy through its various councils with this distinct purpose. The Council on Health and Public Instruction, of which I am a member, and which I here officially represent, has for its definite purpose the promotion and elucidation of relationships between the public and the profession.

Corresponding to this official attitude of the organization is a clearly defined recognition, amongst physicians individually, of the paramount importance of such development. It scarcely needs argument to show that the essence of this evolution is fitness on the part of the profession to play its part. Medical education must be not only the best it can be in point of scientific equipment, but it must be broadened in its social aspect to the point of maximum value.

Are we educating our young men and women as broadly as we ought? To say that we are not perfecting them at the point of graduation for valuable service in this direction, though obviously true, does not meet the point. The matter

is essentially very difficult. Medical education has become to the student burdensome. The medical student of to-day is confronted with a mass of scientific material that is appalling, which it is incumbent upon him reasonably to master. So great is this material that it is out of the question for it to be incorporated with exactness, and as information, by anybody in the space of four years.

There is need for the wisest pedagogic method in our medical schools in order thoroughly to accomplish effective education of our students. Drilling into them endless facts, valuable as they may be, will not accomplish this. Clear presentation of principles, thorough training in technique, and abundant opportunity for application of their knowledge, should be the foundation stones of medical education.

With regard to technique, the development of recent years has been marked and of the utmost value. With regard to application, the tendency toward thorough compulsory hospital and dispensary experience is sound and progressive. With regard to pedagogic philosophy, looking to inculcation of principles, the situation is not so satisfactory.

A tendency toward laboratory development has drawn us away from the more deeply cultural aspects of medicine. In two directions, notably, medical curricula are deficient. Speaking broadly, there is no education offered to medical students in the fundamentals of hygiene and psychology.

Any experienced practitioner whose perspective corresponds to his experience will recognize the weakness in this situation. In part this omission is due to the flood of material which has seemed to demand recognition in the curriculum. In part it is due to an intense demand for scientific training which in recent years has dominated the profession and which has resulted not only in the overcrowding of the student mind, but in noticeable minimizing of the practitioner aspect of the graduate.

If one could assume that matters of sanitation, personal

hygiene, and psychology could be left to specialists, the existing policy could be defended and special instruction afforded. Such an assumption, however, is not sound, and unless we are to trust to years of blunder and struggle to drive home to our medical men their ignorance and inefficiency, we must do better with primary education. Either it is to be satisfied to have the well-trained young medical man furnish his purely scientific contribution, relying upon some intermediate functionary to make this effective, or he must be equipped in such a way as to connect his science with his practice in a more comprehensive way.

I dwell upon this with greater emphasis because I believe the truth is not realized by leaders in professional thought and method. It is because the regular medical profession has been truly deficient and in error in the various ways which I have hitherto discussed, that the world is so full of isms, pathys, and pseudo philosophies in medical affairs. We are responsible by default for most of the fantastic therapeutic heresies that pervade society to-day.

I have taken your time thus far to discuss, as I believe fairly, the faults of the medical profession. Fortunately I am not gifted with powers of invective and craving to exploit them, which lead persons of supposed authority and inside knowledge into scathing and scornful abuse. Nothing is to be gained by that kind of discussion. "Exposure" of the faults of the medical profession, breaking forth from time to time, accomplishes nothing except notoriety to the author of the attack. Fair admission of the facts as they are and analysis as to their true explanation are certainly worth our while.

I have said nothing nor do I care to say much about the pecuniary aspects of our problems. That there are abuses in this field is beyond question. That professional dishonesties can be made the basis for pecuniary gain goes without saying. That there is room for review in the compensation of medical men is distressingly evident. These

things, however, are not fundamental to the integrity of the relationship of the profession to the public, but will adjust themselves on a basis of commercial integrity, finally. It is a topic too large and important to be dealt with in a paragraph. There is fully as much room for solicitude that medical men in general be not underpaid as that a few individuals be not overpaid. These questions are important but are not as basic as I think are the phases which I have discussed.

With all qualifications which may be made as to present value of the service rendered by the medical profession, and unconfused by reservations which are an inevitable consequence, the prime question in the whole matter, I repeat, is, What are the values in medical science?

The more thoroughly human affairs are investigated, the more the underlying causes for social conditions are discovered, the deeper a knowledge of social pathology becomes, the more manifest it becomes that mental, moral, and physical values in human affairs are ultimately questions of health. From the vague, intangible, and unorganized but deeply impressive facts of heredity, on through the intricacies of the philosophy of environment, and on again through the currents and counter-currents of social development, all inextricably interwoven and interdependent, there shows forth with increasing clearness and irresistible conviction a picture of a world proceeding towards its destiny, safeguarded only to the degree that it is sane and sound.

It is to these factors of sanity and physical soundness that medical science addresses itself. In no field of human endeavor is there so much earnest, self-sacrificing, truth-seeking and truth-demanding labor, as is to be found in the workers in medical science. Their standards are high, their criticism profound, their patience inexhaustible. Year after year, decade after decade, they are delving into the obscurity of life phenomena, and encouraged by every detail

of discovery are undaunted by floods of disappointment arising from inherent difficulties in their task.

Medical science knows no country, no creed, no politics, and, in general, no personal advantage. The underlying motive is truth which may be applied to the benefit of mankind. Whatever the off-shoots from this development, it must be recognized that the fundamental purpose is honest, dignified, and indispensable.

The detachment of workers in pure science from the practical affairs of life necessitates bridging a gap by efforts of medical practitioners. Not less than to the master minds of research must we give recognition to men and women who are on the firing line.

It is true that the resources of medical knowledge are not as yet fully available for the public weal. This is, however, in no sense a reproach to the medical profession but is distinctly a defect of social organization. For the rich, all possible resources of material character are available. For the very poor, all such resources relating to immediate treatment of disease of a type grave enough for hospital care are freely available, but for the great mass of people neither rich nor paupers, to whom the factor of cost is a vital consideration, the resources of medicine are available in but a fragmentary degree.

It is in this field that the practicing profession meets with its most serious handicap. No matter how keenly a physician may discern the outlying factors in his experience, no matter how deeply conscious he may be that the root of the conditions he deals with lie far below the surface of his problem, he is face to face with conditions of social mal-organization that render his utmost contribution discouraging and futile. Is it any wonder, under these circumstances, that his work is in places superficial? Nevertheless, justice demands that he be given the fullest measure of credit for patient, persistent, and intelligent effort to overcome these difficulties as best he may.

We are prone to discuss medical matters from the standpoint of their elaborate and conspicuous episodes amongst the well-to-do or from the brilliant and well coördinated activities of hospital life. It must be borne in mind that the mass of medical experience lies amongst the working people. It is here that economic aspects of health problems become so pronounced. In social affairs we are prone to consider people from the standpoint of dependence or independence. In medical affairs the classification and definition fails. For the average man who is a wage-earner, the question as to his dependence practically turns upon his ability to go to work to-morrow morning. Whatever devices may have been developed for meeting the situation, that is the bald truth in the matter. Practitioners of medicine recognize this and have it to deal with as have no other class of citizens.

From an economic standpoint all classes of citizens taken together render less substantial aid in meeting this situation than is rendered daily, weekly, and perennially by the rank and file of the medical profession.

A physician has in his clientele an industrious, self-respecting family. They run on comfortably, seeking his aid and paying their bills, maintaining a normal relationship. Some disaster of ill-health overtakes the breadwinner of the family. In a flash they are transferred into a position more or less dependent, and are unable to pay.

The one individual in the community from that time forth, who carries that load without compensation and without murmur, is the doctor, and these experiences are occurring daily, and by the hundred thousands. Try to picture all that that means in those distressing circumstances? Does it make the story of the doctor of the old school something to be cast aside as outgrown, or does it leave it as one of the great fundamental human facts? But in so far as there exists this value, is it any less than fair that the judgment of the public upon the medical profession shall be

exercised with true vision as to the real contribution that it makes?

These are aspects of conventional and time honored practice of medicine to which I have wanted to call your attention. There remains another aspect in which is presented the great field of future activities for the profession.

The general subject of public health, in spite of its tremendous development in recent years, has not been properly coördinated with the medical profession. In spite of the fact that the initiative and insight in public health matters have come primarily from physicians, there exist two fundamental defects in organization and development of the enterprise.

The public has never intelligently estimated nor fairly measured the contribution to public welfare embodied in the labor of the enlightened physicians who stood behind the move. The rule is that any measure of importance dealing with health advancement, particularly through legislative measures, has been met with indifference, discredit, or active opposition from large groups of citizens. The basis of opposition has varied. As a rule, selfish interests have organized opposition. Frequently they have been able, through skillful manipulation and adroit play upon the prejudice of the public, to muster formidable forces from the ranks of people who are not selfish in the matter but who are ignorant of its true bearings, and upon various fallacious hypotheses suspect an invasion of their rights. Although doubtless, here and there, measures have been proposed by physicians who are not clearly disinterested, in an enormous preponderance of instances self-interest has played not the slightest part. Although an occasional opposition to public health movements has been honest and without sinister purpose, in the great majority of cases selfish motives, resting upon vicious public policy, have initiated and manipulated the battle.

I know of no department of social effort in which the

underlying motive in promoting public legislation has been so altruistic on the part of its sponsors. I know of no field in which the basis of opposition, when traced to its root, has been so sinister. The public does not see clearly what is at stake. When it does, the difficulties upon this score will melt away. It is as true in this direction as in others, that public sentiment must move reasonably abreast of legal enactment. The path before the medical profession is clearly and simply education of the public.

This brings us face to face with the second defect in development. Agitation of public health matters has been markedly an individual matter. The rank and file of physicians have exhibited the same indifference, a large measure of unintelligence, and occasional misguided opposition to progress in this line. These facts are vital to the whole matter; until the profession as a whole can consider itself an instructor of the people, progress will be slow and fragmentary. The prime requisite in furthering the purposes of public benefit must be confidence on the part of the public as to the disinterestedness of the profession in the matters which it projects.

Although as a rule there has been small basis for doubt upon this point, here and there utterances and movements are in evidence which have neither intelligence nor responsibility behind them. Once in a while we hear, from the proponents of legislation, arguments so trivial, so selfish, so shortsighted as to be unworthy of serious consideration. Nobody who knows the truth regards them seriously.

On the other hand, they furnish ammunition for forces in opposition, and from time to time we are confronted by utterances ostensibly representative of our professional attitude which could have emanated only from fools. Our great difficulty within the ranks is failure to realize the paramount importance of the issue and the inevitable trend of human events. Failing in this, indifference becomes an almost crushing load, which has to be lifted before any real

advance can be made. It is by stimulating ourselves to become intelligent leaders of the people that we can most contribute to the public weal.

Although development of public health interests can go on in a measure without us, it can never reach its full measure of strength and beneficence except upon the foundation of our generalized contribution.

In the meantime conditions underlying final organization looking to safeguarding the health of the race are gradually being adjusted. Recognition of the fact that industry is in the last analysis a matter of health is widespread. All of the great questions related to the well-being of the masses in their work, their play, their opportunities, their habitations, their livelihood, their infancy, and their old age, correlate absolutely in the one great factor of health.

Our public health departments, medical schools, laboratories of research, our scrutiny of industry, safeguarding of schools, are contributing each in its field to the vast array of fact, upon which will ultimately be founded an intelligent structure of systematic living. Beyond any question, however, an interpretation of this gospel must finally rest with the medical profession. Interpretation, however, is but the first word in progress. The last word is coöperation of the public, induced by every available activity in education.

The greatest obstacle to coöperation invariably is distrust. The greatest incentive to coöperation is recognition of community of interest and confidence. I stand here to-night arguing for the former and pleading for the latter; "By their fruits, ye shall know them." Gladly submitting to that judgment, the medical profession demands, as it acknowledges it owes, a square deal; that it be not loaded with unjust or illogical responsibilities, nor judged by vicious and perverted standards, but, in so far as it brings to bear upon questions of public welfare, intelligent, scientific, and disinterested effort, it shall be accorded, on the part of the public, coöperation. It asks no more.

II. AGRICULTURE AND DAIRYING

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TUBERCULOSIS IN CATTLE

WHEN I was invited by your president to deliver this address, I was conscious of some hesitation in doing what I was in fact very anxious to do.

The question came to me, fully as sharply as it can have come to you, as to what right I had, with my limited experience in breeding cattle, to take the time of past masters in the art, in the discussion of its most difficult question. Further reflection, however, led me to see that in practical dealing with Tuberculosis, there are no past masters, and that a life-long study of it as a daily problem, even though not as related to cattle, entitled me to opinions that I would like to share with men with whom I have a common interest. Moreover, I have been in close relation to the American work directed to the control of tuberculosis in the masses, and hence have gotten in full the bias and the point of view of those who approach the problem of tuberculosis in animals, from the side of human relations. If, therefore, I differ from much that exists to-day upon that side of the question, it is not a partisan differing, but the gradual growth of a fuller understanding of the subject.

Primarily, let me say that there can be no conflict between the real interest of the cattle industry and the real health interest of the Public. Where they clash, misunderstanding, misinterpretation, and bad judgment are to blame.

The cattle industry exists for the benefit of the human race, and for no other reason, and it is absurd to admit a conflict. This unquestionable fact makes it imperative that whatever is done for the advancement of cattle shall have in view also human welfare, but it makes it more imperative that what is undertaken for some obvious need

of people shall not be so imperfect and limited in its effect as to damage an industry which is fundamental, so far as we now see, to human existence.

The great danger in the active work of regulation and protection that is going on over the country to-day, is failure of the proponents of legislation to view the matter in all of its bearings.

It is about legislation that the battle is fought; so foolishly but generally regarded, as the farmers against the people. It is the old story of a party having rights but no practical knowledge, in a struggle with a party having also rights but in addition the deepest practical experience.

The tendency of the party with experience is to scorn the views of the inexperienced. The tendency of those who claim their rights, though acknowledging their ignorance, is to question the motives of the antagonists. Both are wrong, and there is no greater opportunity for statesmen to-day, than to get them together.

As I see it, the greatest need now is clearly to define the issue. Up to this time, legislative enactments concerning dairy cattle have been based upon two propositions: first, that tuberculous cattle produce milk containing tuberculosis germs; second, that such milk is harmful to human beings.

Are these two propositions sound? There is no doubt that a tubercular cow may produce milk that contains no germs of tuberculosis, in fact, that the great majority of infected cows do produce at the udder milk free from such germs. Yet the fact is, that the dairy product of such a cow is likely to be infected by contamination from herself or from her infected neighbor. It is therefore true that the milk of an infected dairy is sure at times to be the bearer of the germs of tuberculosis. Hence, the first proposition cannot be gainsaid.

How then, the second? Is milk containing the germs of tuberculosis harmful to human beings?

You know the conflict among scientists that has been waged upon that question. Gradually light has come out of the darkness, and it is now the prevailing opinion, which I share, that to a limited extent certainly, and perhaps to a great extent, bovine tuberculosis is transmitted to human beings in milk, producing disease which, if not identical with human tuberculosis, is none the less progressive, destructive disease. No matter how little, no matter how different, if this be true, it is a legitimate subject of consideration from the standpoint of human welfare. The more it is related to children and babies, the more obligation to meet it.

Here, then, is the crucial point: Is the attention that is turned to this subject in the interest of human health based upon a clear conception of the foregoing facts? Let us make the answer clear. It is not.

The fear of tuberculous milk, now generally entertained by the public, is based upon what now seems a misconception. To the general public, tuberculosis means consumption, that unspeakably dreadful scourge of the world. The idea that milk is a large factor in producing consumption of the lungs, which prevailed a few years ago among scientists, prevails to-day among the people. Naturally the prejudice upon that basis is very deep. Legislation and regulation started under that belief. Promoters of health legislation have urged the human susceptibility to tuberculosis to the full as a pressure to secure protection. The result is that the public, believing something that is way beyond the proven truth, has one point of view. The milk interests, being much more closely informed as to these facts, if they wish to be, either stand upon these facts or, repudiating them entirely, have quite another point of view. There is consequently no sympathy in the situation. The public, in demanding what it has a right to, enormously over-states the dangers. The dairymen, knowing this, and knowing also the enormous difficulties in the practical solution, fight as though fighting for their existence.

The people majestically wave the wand and say, eradicate tuberculosis. The farmer, whether he knows enough to want to be free or not, knows, by dire experience, that rough-shod and inefficient ways of going at it bring ruin and no results. Naturally, even if stupidly, he shows a sullen resistance. He knows that dishonesty, incompetency, and empiricism have marked the progress of this crusade, and he fears the cogs of government that is not wisely and honestly administered.

All this may be, and still the purpose of the two sides may be sincere. But there is an element far worse in it. The question has got into politics. If I could paint you a picture I have in mind, no words would be needed.

At a late meeting of the committee having to do with agriculture and dairy interests of the Illinois Legislature, the question was up whether the committee report out for passage a bill requiring that cattle shipped into the State be tuberculin tested. The bill was known as the "Fence Bill." The meeting was addressed by the spokesman for a group of retail milk producers there present. The committee, about to report the bill favorably, was represented by one of its prominent members as spokesman. The arguments against the bill, lasting several hours, in epitome were:

1. That there is no such thing as tuberculosis that harms cattle.

2. That there is far less of it than there used to be.

3. That a man can tell it by examination, if it exists.

4. That it does no harm anyway.

5. That tuberculin will not detect it.

6. That tuberculin will induce it.

7. That mistakes occur.

8. That it is dishonestly done.

9. That the whole agitation is in the interest of veterinarians and officials who want jobs.

To all this, the committee, through one of its members, replied. Now note the *tone* of the answers:

"I don't believe in the bill. I believe the tuberculin testing is nonsense as much as you do, but Wisconsin has a law so stringent that it is said that Illinois will be a 'dumping ground' for infected cattle; moreover, we are reporting for passage a bill prohibiting municipalities from making ordinances that will discriminate against tuberculous milk, and we have to pass this law as a concession to get that law passed, for that is the way legislation is done." The latter law proposed, be it said, was an outgrowth of a personal fight in Chicago.

Hence, on this economic question, a law was recommended not with the least belief in its merits, but as a make-weight in the waging of a battle of local and factional character in the politics of a big city. When you add to the normal clash of opinions and interests amongst honest people this mixture of ignorance, misstatement, selfish interest, and political maneuvering, is it any wonder that we are getting nowhere either in harmony or results?

But this situation is not hopeless. There stands between these two factions another class of men, for the most part breeders, who recognize this great truth. Tuberculosis in dairy cattle is not a *baby* question, it is a *cow* question. Until that is recognized by the many as fully as by the few, the subject will remain in its present confusion and odium.

The proposition is simple. Is tuberculosis a menace to the cattle industry? That question can be met, discussed, demonstrated, and measured without conflict or ill feeling. But I am convinced that any substantial progress in eradicating the disease must be made upon the line of the intrinsic interest of the industry and not upon some outside issue, no matter how important in itself.

Many men who, like me, are active in the work of combatting human tuberculosis, are of this opinion. Without criticising the purpose of health legislation upon this point, I am convinced that, in the effort to eradicate the disease in cattle, it is ineffective, and so far as it is the course of

bitterness and controversy, it actually retards the development of sound opinion.

In support of this I call you to witness that the active opponents of tuberculosis legislation make this fight mostly upon the question of danger to human beings, and rarely discuss the prospects of the industry.

I am not going to stop to discuss with an audience like this the question as to whether it is a menace. I assume that we are agreed:

1. That tuberculosis is a contagious disease.
2. That if no measures are taken to prevent it, all animals closely in contact with diseased individuals are liable to it, and none are immune.
3. That sooner or later a percentage of animals that become infected become worthless.
4. That any animal so infected may become a source of danger to the herd.

It is not enough that such men as are here gathered should believe this. Understanding and belief in these truths must be practically universal before the cattle world is in position to advance far.

The breeders and especially enlightened individuals are a small minority. There are hundreds of thousands of owners of cattle who are producing and distributing disease, and they must be convinced.

And why, we may ask, is it so difficult to convince them?

Why should n't it be difficult? The cow that goes to the end of her disease, where she becomes worthless, obviously in consequence of tuberculosis, is the exception. Before that period, she is sold or slaughtered and the object lesson is lost.

What farmers are shown is the mass of cattle, most of them in apparent health, which "react," and they see, if they follow them to slaughter, a majority of cases in which the disease is apparently insignificant and sometimes quite absent.

Let us draw a parallel in human affairs. Suppose that very few people ever died of consumption but were carried off by some other process before their disease was very evident. Suppose, in addition to that, that all people were subjected to tuberculin test, and it were found, as it would be, that somewhere from 60 to 90 per cent reacted at some time or other in life, and that of these a large percentage yet recovered; would it not be infinitely difficult, in the absence of death from the disease, to impress the public with its gravity?

Well, the situation with the owners of cattle is like that, and in addition they are alienated by the predominance of considerations that they regard as spurious.

No one who has not struggled with the problem of trying to persuade human beings of the importance of human tuberculosis,—those whose lives are at stake,—is in position to realize the enormous difficulties involved in bringing to that point of intelligence the mass of owners of cattle as to bovine tuberculosis. To this end every legitimate agency will need to be taxed to its utmost, and the struggle is not one of years, but of decades and perhaps of generations, and yet this struggle must be made.

Practical experience is eloquent enough upon this subject, but scientific training adds greatly to a grasp of the specific dangers and difficulties involved. If the veterinarians are especially active in urging preventive measures, it is because of their especially trained faculties and not because of self-interest.

It is naturally very hard to persuade a layman who has no clear comprehension of the qualities and behavior of disease germs, that a cow in apparent health and with full performing capacity can be spreading the germs of infection in the most prodigal way. Nevertheless this is true, and until this truth can be hammered home in such a way as to make it a matter of conviction to all, these dangers can not be eliminated.

There is great obscurity in the minds of most people as to the methods by which the disease is spread. Careful experiment shows beyond doubt that far and away the most important path of contagion is through droppings of diseased cattle.

On the face of it this suggests two facts: First, that tuberculosis will be spread enormously amongst such animals as follow cattle, in particular hogs. Second, that it renders especially vulnerable all animals susceptible to tuberculosis that are fed upon milk, which is contaminated unavoidably by the fecal material from diseased cattle. Here at once opens the question of the feeding of calves. Beyond doubt, calves are, by reason of their age and immaturity, particularly susceptible to tuberculosis. They are fed largely upon milk and experiment has shown that calves fed upon tuberculous milk are liable to acquire tuberculosis. Why, under existing conditions, it is not more inevitable is a problem.

There can be but one conclusion to draw, namely, that all possible precaution against feeding calves tuberculous milk is the part of wisdom. In itself, this is a matter entirely possible to accomplish, and the attention of cattle breeders should be directed with the utmost emphasis toward providing for young stock milk which is not so contaminated. When this is effectively done, a very great advance will have been made.

There remains, however, to be considered, the methods by which mature cattle acquire disease one from another. Upon this point there is considerable obscurity. Observation has shown, however, that the saliva of certain of the infected cattle carries the infection. This means that the muzzles are more or less the point of contact, and of course this opens up the question of stable infection and all its difficulties. The probability is, the danger from the mouth and muzzle of the cow is not nearly so great as that from the feces. This, doubtless, in a large measure accounts for

the fact that the disease does not spread more rapidly than it does amongst the adults; but that it does spread gradually throughout the herd, if unrestricted, there is no possible question.

It would, perhaps, be less difficult to bring firm conviction home to the farmer as to these questions if we were in a position to offer a clear line of procedure which affords a distinct way out of the difficulty. In fact, if there is nothing to do about it there is no practical use in bringing about such conviction.

When we undertake to discuss remedies it is of the utmost importance that we discuss practical remedies. The commonest comment that one hears runs like this: "Oh, yes, so and so has plenty of money, runs his farm as a fancier, and can afford to test and slaughter as often and as much as he chooses." Testing and slaughtering to the average farmer seems like a ruinous business and often is, and it is true that if all tubercular cattle could be slaughtered forthwith, not only would the result upon the milk supply of the world be disastrous, but the disease would within a short time be just as prevalent as before, unless the process were rigidly followed up.

Some plan of action has got to come into vogue whereby as a common and recognized practice herds shall more or less automatically be protected by current methods.

Are such methods possible and practical? Let us again seek an analogy in the experience with human tuberculosis. There exist in the United States to-day upwards of five hundred separate organizations created for the purpose of combatting tuberculosis. For the most part the efforts of these bodies have been directed, first, toward detecting early cases; second, toward curing early cases, which alone are curable; third, toward establishing better living conditions for the masses; and fourth, but almost *infinitesimal* in amount, toward protecting society from advanced cases which are spreading contagion.

Already, even while the warfare is so young, we are coming to see that we have attacked the wrong end of the process. Wherever careful observations have been made, of sufficient breadth to be decisive, it is clear that the only great progress that has been made in limiting the disease has been in consequence of efforts to separate the dangerous or disease spreading cases from the healthy.

It is recognized that without hospitals or other appropriate retreat for advanced cases of consumption the spreading of the disease can not be checked. The human problem, of course, is far more difficult than the animal problem, because diseased individuals must be permitted to live out their lives and because, further, there is enormous prejudice against separating the diseased person, no matter how dangerous, from his family and fellows. Neither of these conditions apply to cattle. They can be killed if it is best to kill them, and they can always be separated if we will take the trouble.

Here, then, is the key to the situation. The cow which is spreading tuberculosis from her own discharges must be separated by death or segregation from the others. I believe this conclusion inevitable, and that a course of action in accordance with this principle will be by far the most important factor in the future of this movement. It leaves, however, this most difficult question before us: How can it be determined whether a cow is diseased and dangerous to its community?

We have a reasonably satisfactory method of determining whether an animal is diseased or not. We have no practical method of determining when she has become a dangerous point of distribution.

The conflict of opinion over the tuberculin test is very intense and yet in this clash of opinion there is a distinct confusion of thought. The advocates of tuberculin testing maintain that a very large percentage, over ninety-five, of observations are accurate, that is to say, a positive

reaction distinctly means tuberculosis of some degree or other.

The opponents disputing this accuracy to a large extent, also have the strong argument that the test in animals will show disease of distinctly negligible amounts. In other words, their contention is that the tuberculin test shows too much.

Is it not true that whether the tuberculin test shows too much or not, depends upon how one treats the information so derived? If by precept or by law we demand that all reacting cattle shall be killed at once, we are putting ourselves in an untenable position, for three reasons:

First, because there is a chance for error that should be corrected by subsequent observation.

Second, because we would kill an enormous number of valuable cattle, which, from an economic standpoint, should not be killed.

Third, because there is a way under proper circumstances of dealing with the matter without this drastic process.

Nevertheless, while all these considerations are sound, they all must be considered in the light of the general principle heretofore stated, that separation of disease spreading cattle from the healthy is the only known safety, and as a corollary thereto, while we are ignorant of any means to distinguish dangerous cattle from harmless cattle, all reactors should be regarded as possibly dangerous and treated under the principles of segregation.

I am fully aware that this is generally regarded as impracticable for the ordinary farmer, but I say it is not. There is no farmer whose ingenuity and resources are not sufficient to encompass this protection if he believes in the importance of it.

There is one other question of vital importance and very difficult to discuss: How much do living conditions of cattle influence their susceptibility to disease? What has been learned in the way of curing early tuberculosis in human

beings has had an enormous reflex influence upon the living conditions of the people. The three elements, food, fresh air, and rest, that are the foundation of cure in tuberculosis, are obviously the bulwark of protection against tuberculosis. This we have learned and no one has any doubt about it. Nevertheless, even those who have lived in the best of conditions, under certain kinds of exposure will contract tuberculosis, so that no one attempts to maintain that there is such a thing as absolute immunity. It seems to me, however, safe to assume that the general tendency of the race to develop tuberculosis will be limited just in proportion to the sound hygienic life which the race may learn to lead.

If this is true of human beings, it is fair to assume that it is true of cattle. This brings to the front, with the utmost emphasis, the question of living conditions of cattle.

Time forbids that I should discuss this matter in detail. Everyone knows how far from perfect the best conditions are, and how unutterably bad the worst conditions are.

It is for the enlightened and financially able to determine by every practicable means, and to demonstrate upon every proper occasion, the principles of good hygiene for cattle.

It seems to me incumbent upon every breeder and every extensive farmer to build his plans in such a way as to throw light upon this practical warfare, and create under careful management object lessons for the benefit of all owners. How is the model breeder going to keep and influence his neighbors?

The key to the situation is this, that the owner of cattle shall want to *know* whether his herd contains tuberculosis or not. Once he *wants* to know he can find out with reasonable certainty. Once he *knows*, his course need encompass but three things:

1. Actual and effective separation of his diseased cattle.
2. Protection of his calves.

3. Good living conditions for his healthy cows.

Need I stop to acknowledge at this point all of the weak places in this reasoning based upon the tuberculin test? Let us admit all of the contradictions and errors which there are in that test under our present knowledge, and then be profoundly thankful that it is as good as it is. Without it we should be in the densest ignorance, but with it we shall work out practical methods going very far toward the solution of our problem. It is enough that at present we have a great deal to learn about it.

And now let me say, with full knowledge of how easy it is to say and what difficulties it involves, that the essence of this whole question is education.

No more important question faces the economic world to-day than the determination of comprehensive and effective schemes of education upon this subject. It is quite out of the question to go into that matter in any considerable detail. Agricultural colleges are addressing themselves to this subject assiduously and with great effect. Associations of breeders, I believe, can add enormously to educative influence by independent or coöperative schemes of education. Traveling exhibits, institutes of instruction and comprehensive field work, offer untold opportunity for the dissemination of knowledge and the creation of public opinion.

I am inclined to believe that wise legislation can be made the most effective educational influence open to us. The reservations which I have expressed with regard to existing legislation are not reservations as to its propriety. It is as to its effectiveness as bearing upon the question of ultimate eradication that I express my doubts. Legislation which is of a summary and mandatory character, although probably necessary to some degree, is after all open to these objections:

First, it is never exacted upon ideal lines. The controversy arising over this agitation inevitably results in

compromise, that almost invariably permits weak spots, more or less invalidating the entire purpose. Moreover, it is acknowledged that almost all statutes upon this subject are productive of more or less injustice. The statute that compels the cleaning up of a herd, and puts no restriction in the way of filling it up with diseased cattle, accomplishes nothing. The statute that fixes a compensation with a low maximum value puts a premium upon the condemnation and slaughter of inferior cows and of young individuals. Such cattle can be condemned at a profit. It is quite possible for the State to pay more than the value of cattle even if they were entirely sound, in the process of condemnation as tubercular. These things are matters of practical adjustment, which probably can be solved.

There is a second reason why mandatory legislation is ineffective. It arouses widespread antagonism on the part of farmers because of real or fancied injustice. It is true that the commotion created by the passage of laws has a certain educative value, but, for the most part, adherence to the law is grudgingly and timidly given, and the grand body of public sentiment amongst cattle owners is far from cordial in its support.

The desideratum in legislation is the establishment of standards to which the owners of herds will aspire to attain. This sounds like reaching out to the millenium. I firmly believe, however, that there is a practical possibility in this direction. The psychologic value of coöperation invited, as contrasted with obedience enforced, is of enormous importance. It would be possible for the State to establish machinery for the purpose of accrediting herds of cattle, which would go far in securing general coöperation. If the owner of a herd of cattle could be granted at intervals a certificate setting forth that he had complied with certain specifications under conditions both intelligent and honest that justified the warranty that his herd was, so far as possible at a given moment, free from tuberculosis, the

eagerness of owners to get upon that accredited list, though of slow growth, would be irresistible. This seems like a too simple, too feeble procedure to command much respect. The very freedom from compulsion is its greatest strength. It would undertake to place a premium upon good conditions, which would have a large pecuniary value and an educative value in direct proportion to the extensiveness of its operation.

Voluntary organization for this purpose, it seems to me, would not answer. The unquestionable authority and guarantee of the government would be necessary for the maintenance of confidence in the institution. What relation this would bear to mandatory legislation, it is not possible to foresee. Clearly it could not supplant at the moment such legislation, but it has a different purpose, a purpose, on the one hand educative for farmers, and on the other offering protective guidance to the public.

I am conscious that to throw out a fragmentary suggestion like this is not only to invite criticism, but to raise grave doubts as to the practicability of the suggestion. This is no time to discuss the matter in detail. In fact, I have but time to conclude my remarks by again reiterating what I regard as the three essential principles in tuberculosis warfare:

1. That it shall be treated as a question of the cattle industry and not as a human tuberculosis proposition.
2. That the only possible way to limit the disease is by separating tubercular cattle from non-tubercular cattle and rearing healthy calves.
3. That the general resistance of cattle to tuberculosis shall be fostered and in a measure secured by thorough sanitary living conditions.

In putting sanitation last I do not underrate it. But I do maintain, that without separation of diseased individuals and protection of calves, the most perfect sanitation will fail.

In conclusion, expressing my appreciation of having been permitted to address this gathering, I have to apologize, for what seems to me considerable dogmatic statement.

Let me, however, urge you to bear in mind that experience and struggle and failure breed dogmatism at times, and that the observation of physicians in this territory, of tuberculosis and health legislation, are not without point.

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THE HEALTH AND DEVELOPMENT OF THE DAIRY COW

THERE is a popular impression that the science of agriculture, the rapid progress of which is a matter of comment the world over, is approaching the point of exactness. This takes form in a number of generalizations as to soil, seed, culture, breeding, and rearing which convey an exaggerated impression, not only as to actual achievements of science, but as to the relation it bears to the mass of knowledge which exists upon these subjects. So far as relates to the practical problems of the world, scientific determination has usually followed practical knowledge and served to organize it rather than to initiate it. Almost everything we know about the best in agriculture has been known to somebody or to some peoples for a very great time, and the significance of present-day activity, interest, and comprehension is not so much the discoveries of science as it is the concentrated systematic promulgation of scientific determination through broader education.

The conclusion, therefore, is necessary that accumulated experience, from whatever sources, is of the highest value in the department of agriculture as in other departments of life, and the problem before the modern farmer is to harmonize that experience with the facts which science from time to time clearly demonstrates.

Hence science serves to illuminate a field thoroughly familiar but in many respects obscure.

The essence of science is its spirit rather than its statement. He who is to be guided by science must at the outset hold his knowledge lightly, remaining eager for

information from every source and willing to take up or abandon any theory as its soundness is proved or disproved by scientific progress.

In the field of animal culture, which must always be a domain of agriculture, there is probably less actual advance due purely to scientific discovery than in any other field. Nevertheless, suggestions as to methods and principles in animal culture, which follow developments of physiology on the one hand and heredity on the other, are in the highest degree inspiring and offer great hope of signal advance in the future.

It is worth taking note of, that the great discoveries in heredity have been made in connection with plant culture, and that the discoveries of physiology and in part of heredity have been made in connection with the lowest and simplest forms of animal life. From this we must derive the lesson that inference and conclusion as to the fundamental principles of heredity and development are not safely to be founded upon observations, no matter how intelligent, made upon highly organized animals.

What we know practically about breeding, however, and the methods which we pursue, is as yet of necessity founded upon the experience of intelligent and industrious breeders, and up to this time these demonstrations must be our guide.

There come in, however, from time to time, ideas founded upon studies in heredity upon the simplest forms of life which may be set down as fixed principles, and it is of the utmost importance to the breeding enterprise that as rapidly as these principles become established, breeders should fit them in to their scheme of ideas no matter what apparent practical view may have to be discarded in so doing.

The principles of heredity and growth necessarily can be established only in connection with organisms so simple that the terms of the problem can be clearly seen. When

we come to organisms so complex as a domestic animal, conditions are so confused that it is impossible to work out scientifically conclusive results. Nevertheless, conclusions reached by scientific method can be applied in some degree to problems most intricate.

My theme to-day has to do with heredity, except in the broad generalization that it is the fundamental determining influence in all breeding operations. The problem of the breeder is intelligent selection on the one hand and painstaking culture of the products of his selection upon the other. My theme, therefore, is limited to painstaking culture of animals which we shall have bred, and it is further specified by my subject that I discuss Health and Development.

The development of a dairy cow is our object. The ends to be secured are three—constitution, size, and specific function. Constitution is an indefinite word, of which we vaguely conceive several desirable attributes. Most important of these are capacity to assimilate food, ability to transform such food into milk, to procreate, and to resist disease. It is conceivable that we may have either of these three without the others. Our problem is to combine them.

It will be seen at once that the question of size is more or less closely related to the capacity for assimilation of food, also that milk and reproduction are the essence of specific function. The interesting question is, Are there conflicts in the various methods which we may pursue to these ends? Aside from hereditary endowment it seems to me clear, that the determining factor as to the capacity of a calf to assimilate food is its daily habit and experience. If we are looking for the highest degree of transforming power of food into milk, it is fair to assume that consistent pushing of the assimilating power within the limits of health maintained is necessary to establish the best results. Although there is room for the best judgment as to what

is consistent with health, all experience in the rearing of animals, as well as human beings, goes to show that growth and assimilative power are both dependent upon judicious crowding of food in the early period of life. Let us not be led astray by the popular dictum founded upon sound observation that it is well to keep calves hungry. Whatever truth there is in that observation, it is but a practical method and not a principle. It is simply a way of satisfying ourselves that the calf is not overfed, and does not at all mean that the purpose for which we are working would not have been better secured if the hungry calf had been fed more. It must consequently be regarded as a measure of safety and not as a principle of action.

With other domestic animals whose rearing is attempted under different physical conditions, there is no suggestion that it is desirable to keep them hungry. In draft colts, for example, whose value is related to size, all experience goes to show that early feeding is indispensable. Less trouble occurs with them, however, because of the freedom of their lives as compared with the hot-house methods employed with dairy calves.

This question, however, presents itself and is prominent in the minds of many breeders: Does the heavy feeding and development of dairy calves have a tendency to transform them from the dairy type to the beef type? You are perfectly familiar with the discussion of that subject and with the difference of opinion that exists. Practical men have had actual experience that leads them to fear such conflict.

My opinion is that no such conflict need occur. I believe that where full feeding of dairy stock has had bad results, if at all, it is in incorrect feeding rather than excessive feeding. Let me here call attention to the fact that growth of a calf is a matter of skeleton and not a matter of flesh. All people agree that the dairy cow, and particularly the Holstein-Friesian cow, should be brought to its full size. All

breeders know that it is only to be brought to its full size by forcing it during its first two years. The simple question is, need anyone fear to do it lest he impair the milk function?

So far I have an opinion based upon knowledge of physiology. I am strongly of the opinion that the heaviest feeding, consistent with health, of proper skeleton-forming foods can not interfere with the dairy type. I believe that the dairy function is not an accident; that it is an endowment derived from the sum of the ancestors, and that whatever possibilities there are in a given animal are to be fostered and augmented by strong feeding in youth, rather than the reverse.

So far as science throws any light upon it at all, it distinctly favors that view of the matter. My conclusion, therefore, is that in our effort to create a strong transforming machine for turning food into milk we not only must begin this early, but we need not fear that in the process we shall destroy the milk type by creating another type. If there is no such fear, then the factor of size is at the same time secure, and if, moreover, it is true that assimilative power, skeleton, and milk function, are all dependent upon essentially the same kind of food, namely, high protein food, the problem seems to take a definite form.

Right here let me call your attention to something which is not always realized. Bones are not primarily lime or phosphate. They are primarily tissue, more like gristle, a high protein substance, and must have abundance of proteid material to form them. Lime and other salts are put into them ultimately for the purpose of stiffening, but growth of the skeleton is a proteid growth. This we are liable to forget.

There remains, however, a further phase to constitution, of the utmost importance—resistance to disease. Let us depart from the narrow question of cows to the general question of relationship of animals to disease. Most of the diseases in question are infectious diseases. In general,

they must be regarded as a struggle in the body of an animal to prevent the undue development of lower forms of life, usually low plant life, under the general term of "germs." Every sickness represents, not what the germ is doing to the animal, but the struggle which the animal is making against the germ. If it succeeds, it survives; if it does not succeed, it perishes. But sickness is a manifestation of warfare and not a mere passive surrender. Fever, for example, is probably a conservative process and not destructive. It is Nature's method of meeting the germ attack by what we regard as resistance. In the body of every animal struggling with infectious disease there are forming antagonistic chemical substances whose purpose is protection. All serums which we use in practice are the products of such protective reaction and in so far as they are useful it is because of some specific power they have to increase the defense of the animal against the invader.

If it is true that all animals have a certain degree of power to protect themselves against disease germs, the question of hygiene becomes, how to favor the development of resistance. Let me call your attention, for example, to the modern theory and method of treating human tuberculosis. Fresh air, food, and rest are cardinal principles.

Do not get the idea that fresh air is valuable because it does not contain tuberculosis germs. It may or may not contain germs, but its value undoubtedly is in its tonic effect upon the entire cellular mass of which the animal is made up. So also as to food. There is no antagonism between milk and eggs and tuberculosis germs. The benefit lies in the fortification of the tissues in the minutest particle for carrying on its own protective resistance. So, also, as to rest. Probably rest in tuberculosis is of value because it permits the assimilative power of the organism to be concentrated on the upbuilding of the cells and does not dissipate their powers in unnecessary activities.

In fact, it is now manifest that, in combating tuber-

culosis in human beings which is already established, there is a value in prescribing activity which shall result in a reactive fever representing the natural defense of the body, following which activity, perfect rest permits the utilization of the protective products in killing out the tuberculosis germ. The whole thing, however, presents itself as a picture of the warfare between a body and its enemy. If this is true as to disease already established, is there not a truth necessary for us to accept as to the fortification of a body not yet diseased?

In the city of Chicago, as in other places, we have had valuable light upon this subject. Young children of a school age who have tuberculosis have been taken out of the school room, properly clothed, and put upon the roof of buildings somewhat protected against the wind, properly fed and properly rested, but still continuing school work, and have been transformed from puny, deteriorating, mentally defective children, into growing, strong, and mentally alert children. This experiment has now gone so far as to make it beyond question that the proper way to handle such children is in the open air, under proper conditions, no matter how cold or inclement the weather.

The time was when most of the animals in the zoölogical garden of Lincoln Park were prone to tuberculosis. Since changing the method, making them live out of doors, the entire picture has changed, and they now live and maintain a degree of health hitherto unknown. This applies not only to monkeys and smaller animals but even to lions. Out of this we have gleaned a lesson and have reached the conclusion that good hygienic conditions should not be confined to those who are already diseased.

To-day in Chicago the movement is on foot to put all children who are, as we say, sub-normal, into open-air schools. The result of these efforts is astonishing. Not only do these children thrive, gain in weight, and grow, but, they become mentally normal, when almost invariably

they have hitherto been mentally backward. They accomplish in the school curriculum from 30 to 100 per cent more in the year than they did under the former conditions, and in every way the experiment shows that the element which, for want of a better name, we call vitality, was lacking and that that vitality can, in the majority of instances, be supplied by food and fresh air, and I think it is true that neither will accomplish this result without the other.

Can there be any doubt as to the importance of the bearing of this experience upon our dairy problem? Admitting, as we must, the menace, to our industry, of tuberculosis, to say nothing of other infectious diseases, halting along unsatisfactorily as we do with the tuberculin test and its weeding-out method, can we close our eyes to the fact that safety in this situation lies in the development of a vital resistance and that particularly in the earliest months of life?

At this point I want to call attention to this fact. Resistance to infectious disease, aside from tuberculosis, is by no means, so far as we know, related to size, vitality, or constitution. There are many infectious diseases amongst human beings, which apparently attack the very strong as dangerously and perhaps more dangerously than the apparently weak. We are, however, at sea as to what we mean by very strong and consequently are not yet ready to interpret this observation; but so far as concerns tuberculosis, it is beyond question that the strong, well developed animal with large lung power habitually used is more resistant to tuberculosis than the feeble and delicate.

We must, however, bear in mind that there is no such thing as absolute immunity, and that any animal that is too constantly subjected to infection is liable to become tuberculous.

There is no question that there is less infectious material outside the barn than within it. When we stop to consider, therefore, the highly stimulated resistance on the one hand,

and the less exposure to infection that there is in the open air on the other, can we avoid the conclusion that our animals, and particularly our young animals, are safer in the open air than they are in the barn?

If we adopt that as a fundamental principle, there remains for us the problem of fitting this principle into our scheme of operation.

There is no doubt, for example, that calves can be kept looking better in the stable than in the open during certain seasons of the year. There is no doubt that the attack of flies upon young stock hampers its development. There is no doubt that exposure to cold roughens their general condition and appearance. It takes more food to keep them in condition in open air than in stable life.

Have we not to accept these immediately obvious disadvantages and regard them as far more than offset by the advantage not so immediate nor so obvious, but none the less possible, as to development, constitution, and resistance to disease, which our intelligence teaches us really pertains? As farmers we are altogether too prone to follow the line of least resistance, and the line of least resistance is the old plan of a six to twelve months' sentence to more or less solitary confinement. Have we not to use our ingenuity and our liberality in dealing with this problem before we can have reasonable assurance of the vitality of our stock to come?

It has been suggested that continued breeding from tuberculosis cattle, avoiding infection of the calves, would produce a race of animals immune from tuberculosis. The theory, though attractive, is not thus far substantiated, and I have no opinion to express as to its possibility. It certainly, however, is as likely to be true as the reverse, namely the production of more susceptible animals. There is no reason, therefore, so far as we now know, why we should not judiciously breed from tuberculous cattle.

One aspect of the matter of development I wish to call attention to in passing. We assume that growth is directly

related to and dependent upon abundance of food. In general this is true, nevertheless we must understand that the process of growth is presided over by certain definite organs in the body not well understood, the function and activity of which we know generally through abnormality. There are glands known as the thyroid gland, thymus gland, pituitary gland, and suprarenal gland, and others whose delicate balance of activities in the body apparently determine normal growth.

When this balance is disturbed in certain diseased conditions of some of these glands, we find abnormal development. All giants, for example, are not simple overgrowth but are evidences of unrestrained activity of certain of these internal glands. We know very little about this but we do know that the forces making for development are intricately inter-balanced amongst these important organs. There is no definite assistance to be gained from this knowledge except this: it is a fair assumption that balance is to be maintained amongst these obscure but influential functions by maintaining the best of health and under the most favorable conditions. The more we know of these matters the more we are driven to the conclusion that nature is to be followed and assisted. In spite of the fact that in the case of the modern highly developed dairy cow we are dealing with a most unnatural product, there is no reason to suppose that the factors determining life and constitution have not a true and fundamental relation to natural conditions of existence. The question, then, always is, to what extent the unnatural development of the milk function and the industry built upon it necessitates unnatural conditions of living for the animals. And the principle should be to draw the line as close to natural conditions as the industry will permit. In so doing there is opportunity for exercising the best judgment, but I wish to say that the tendency of dairying is to draw the line at convenience rather than at the point of highest health advantage.

In closing I wish to reaffirm my appreciation of experience, but also plead for an open-minded reception of scientific demonstration and correction when it shall appear; to warn against deductions involving questions of scientific principle from observations made upon organisms too complex and under conditions not open to control; and finally, to urge breeders who are striving to produce dairy cows, not so to distrust heredity as to expect to be able to sidetrack the dairy capacity by furnishing abundant food.

There is no question that great dairy possibilities can be reduced and rendered very ordinary by mismanagement of the individual, just as there is no question that good management can bring them to their height, but the features involved in these questions of management are far more specific and influential and are none of them measures which divert type, but simply such as tend to develop or not to develop the opportunity.

The breeders of Holstein cattle are charged with a grave responsibility. At the outset strongly impressed with the importance of type, they have allowed themselves to become somewhat one-sided in the direction of performance. Granted that performance is the ultimate purpose of the dairy cow, I think it needs no argument to prove that, generally speaking, there is a type which carries with it not only the best performance but the best physique.

It seems to me, therefore, that a moral obligation rests upon the breeders of pure blood cattle to steadfastly fight for type, not as a mere æsthetic achievement, but as having fundamental relation to performance.

To this end, it is imperative that breeders add to their discussions of performance the most profound and painstaking study of health and development, in order to avoid the inevitable deterioration that comes from one-sided estimate of value.

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BUYING AND SELLING LIVE STOCK

THE ultimate purpose of a stock handler is to sell his stock, which has appreciated in value through the attention that he has devoted to it. The essence of this question is, consequently, appreciation in value. In order to justify as a business proposition, stock must be acquired either by breeding, or by purchasing at an advantageous price. It must be grown and developed by judicious use of materials. It must be marketed under conditions which secure to the owner a fair price. Under favorable conditions this price will mean a profit. Under conditions only slightly unfavorable, this price will mean a loss. The lapse of time between the first term of this sequence and the last varies. It may be a short time in the case of swine; it may be a very long time in the case of dairy stock; but the period always is long enough and the steps involved sufficiently obscure to make it quite possible to be lacking a clear knowledge as to whether, on the whole, the transaction has been profitable or the reverse.

It is not my purpose here to go into the subject of farm economics. It is with regard to the first and last term that I am asked to give my views. The buying and selling of livestock are the extreme acts in this commercial transaction. Generally speaking, a farmer does not buy a great deal of live stock. Nevertheless, it is probable that a wise and progressive farmer, even though an extensive breeder, will purchase more or less stock, and of course with respect to breeders and feeders of cattle for the market, purchase will be a regular factor.

The limits of this paper will not permit a broad discussion of those activities. General principles are true for all phases

of the market, and specific considerations are very many with respect to the purchase and sale of dairy cattle, to which I shall direct my attention.

Demand for more economical production of dairy cattle and dairy produce is emphatic. As farmers come to realize the small margin upon which they have been running, representing the value of product above cost of production, they become eager for better stock. Whatever specific method they pursue to acquire such stock, the element of purchase is inevitably important.

To any individual the question therefore, is, How can I buy the thing which I need to reinforce my herd? The question is not simple. His neighbor does not as a rule offer for sale his best cattle. The time and effort involved in hunting for stock are almost prohibitive. The opportunity for careful estimate as to the value and adaptability to his particular needs is meager and inadequate. The result is that it is more difficult to-day to purchase stock safely than it is to market it.

For the farmer who is patiently undertaking to build up a herd, the proposition is not so difficult. The careful purchase of a sire, coupled with intelligent selection of produce, is probably an adequate process.

For those, however, who are anxious to branch out into more rapid or more aggressive breeding operations there is a necessity for broader operations. As a result, there has grown up in the dairy world the institution of public sales, which will furnish a market for those who wish to buy and those who wish to sell. On the face of it this appears to be a simple and effective process, whereby the needs of all can be accommodated. Deeper analysis, however, would teach, and experience has clearly demonstrated, that the public sale is good or bad according to its character.

If it is true that the public sale is a sound business idea, as I believe it is true, the problem is then simplified, even if not made easy, by concentrating attention upon the

fundamental character of the sale. There are breeders who have sufficient leisure, sufficient capital, and a large enough business organization, to provide themselves with what cattle they need, at private sale. There are breeders whose standing has been sufficiently established to be able to sell in private a surplus which they care to market; but, taken by and large, these conditions do not obtain and the great mass of breeders who wish to carry on operations, be they more or less in extent, need a stable machinery for marketing upon which they can depend and toward which the purchasing or selling public shall turn with confidence.

I call your attention to the fact that, in the long run, the essence of this proposition is confidence, and the foundation of confidence is experience.

In the hurly-burly of stock trade in recent years, many needs have developed which furnish food for careful reflection. The average farmer, who has a few cows and heifers to dispose of in the year, really needs a broker.

Thus far, public sales of grade cattle have not been frequent. It will probably be a long time before grade cattle will be so disposed of in general. There is no essential reason, however, why regular sales calculated to handle the surplus of the average farmer in groups and communities can not be developed.

There is, however, some question whether that is an economic project. Experience has not sufficiently developed to show whether the great fluctuations in the demand for grade cattle can be adequately foreseen and met by sales at stated intervals.

In Great Britain the local sales and markets are developed to a high degree. Conditions there are very different, both as to farm economics and as to distribution and extent of territory, so that conclusions are not drawn lightly from analogy; but even our present method of buying and selling milch cattle through buyers and brokers is finally dependent upon the quality and integrity of the man so employed.

Investigation will show that there is as much or more difference in the standing of cattle brokers, both with farmers from whom they buy and the large consumers to whom they sell, than there is in the standing of sales organizations which are dealing in purebred cattle.

The stipulations which we are about to make as to public sales can be made with equal force as to the operations and reliability of local buyers. The man who has standing as a square dealer deserves our support. The man who has the reputation of being tricky deserves no confidence.

It is open to any farmer having stock for sale, with the present large demand for stock, to make his choice as to the kind of buyer with whom he will deal. In the long run a dishonest buyer, even though he pay to the farmer full price, will damage the market. The honest and trustworthy buyer, even though he be a somewhat closer buyer, in the long run will strengthen the market. It is important for farmers to realize this remote development of what seems at any one moment to be a minor consideration.

With reference to purebred animals, market considerations are somewhat different and in some ways much more important.

Why should farmers go in for purebred stock? The ordinary answer, that purebred stock is better, is not sufficient answer.

In the first place, purebred stock is not necessarily better than well-bred grade stock. All observers know that in well managed herds containing both grade and purebred stock the grade may show fully as much profit in immediate production.

Considering the cost of investment, this condition may obtain up to the point of high development in the purebred enterprise. Outside of mere fancy, the only sufficient reason for going into purebred dairy stock is a deliberate purpose to build up consistently, patiently, and through a long period of time, a herd of really high quality.

The question may be easily asked, Is that not always the reason? Based upon observation, my answer is in the negative.

In a vague way, the purpose of handling purebred stock would always be stated as an effort to build up a fine herd, but in point of fact we know that in the minds of many farmers who thus embark there is a strong element of gamble. We have become dazzled by phenomenal production and sensational prices.

Every breeder of registered dairy cattle must carry somewhere in his mind the possibility of producing such phenomena. The test, however, of soundness of the enterprise is the idea which dominates the matter. The breeder who purchases his purebred stock, breeds them, tests them, and develops them, with reference to elevating the whole standard and quality of his herd and farm will succeed and will profit correspondingly by being in the purebred ranks. The breeder who buys, breeds, and tests with the sole purpose of making large records, and of being able to sell at sensational prices, is more than liable to fail.

The farmer who makes his agricultural operations primary, and handles his stock as an essential but still subordinate part of his operations, will progress.

The farmer, who, carried away by the glamour of exceptional production and intoxicating publicity, neglects his farm and allows it to be subordinate to his stock interests, will retrogress.

The difference is distinctly one of ideals, and in no branch of human industry are ideals of more importance nor more calculated to make or break an enterprise. The way is strewn with the wrecks of breeders who have substituted for their agricultural ideals, purely speculative ideals.

I feel that we can not too deeply realize nor too strongly warn against the unsoundness of such agricultural conceptions. It is, consequently, for the benefit of those farmers who have genuine agricultural ideals and sound plans that

we must emphasize the importance of a reliable market.

If it could ever be true that the purchaser of a dairy animal could know by inspection all of the facts necessary to intelligent selection, there would be little difficulty. As a matter of fact, however, the history of an animal, either as an individual or through its ancestry, is essential to its valuation. The question, then, is simple, Shall the history be true or false, complete or incomplete? This is the crux of the whole situation.

In some respects, in the purebred circles, the history of animals has been carefully recorded and its accuracy safeguarded so that there is practically no risk. The pedigree is, as a rule, beyond question. The official record as to production, so far as the actual test goes, is practically safeguarded. In both of these respects what is now lacking can easily be reinforced, but there are other considerations involved of the greatest importance which relate not to public records but to the private knowledge of the owners. Herein lies the factor of very great difficulty. To what extent is an owner under obligation to state all the facts with reference to his animal? At how much pains must he present a true picture of it?

Such questions go into the very depths of human conflicts, and serve to set before us all conceivable gradations of honesty.

It is not likely that in this line of business universal honesty can be expected more than in other business. The question, then, becomes, What are the practical means whereby uncertainty and chicanery can be reduced to the minimum, and in consequence, reliability and confidence brought to the highest level?

Up to this time these requirements have not been met with any considerable completeness. Although I think it is fair to say that the quality of the sales and the standards controlling have improved somewhat, close observers of the situation know that there are not established such

rigid standards of dealing as are indispensable if the public sale is to become a permanent and reliable factor in our agricultural calculations.

There has been too much tendency for the managers of sales to say that the public must take its own chances, assuming that they assert nothing that is untrue. As a gambling proposition, that is undoubtedly reasonable, but as applying to the serious question of developing a phase of our public welfare problems, it is indefensible.

There are two essential elements in the makeup of a public sale. One is the quality of the stock offered; the other is the ideals dominating the sale and all that pertains to it. As between a sale of poor stock with good ideals and a sale of good stock with poor ideals, the sale with poor ideals will do infinitely more harm.

There is a natural pride which sales managers entertain as to the results of a sale measured in money or average price. It is perfectly right that a management should desire to present for approval stock which the public will accept at a high valuation, but cunningly to devise methods whereby the average sale price shall be artificially exaggerated, with all its attendant injustice, is worthy only of condemnation. Not only is it hard upon the purchasing public, but it absolutely blows out the foundations from the institution which we are trying to erect.

I repeat, the foundation of the public sale in the long run must be confidence, and confidence can be built up only by unwavering allegiance to honest methods.

In this indictment I have not in mind specific sales. I have in mind in some degree or other the whole sale business as it has been up to this time conducted. There are degrees of departure from that which ought to be. Some sales are worse than others, but it does not lie in the mouth of anybody engaged in public sales to make charges against others unless he can come into the field with absolutely clean hands.

It is not presumable that a breeder is likely to offer at public sale any considerable percentage of his best cattle; but it clearly lies within the province of the sale management that he shall not offer his worst cattle. It seems to me that not only the public interest but principles of self preservation should make it imperative for the sale management to exercise such supervision and selection of offerings as shall be consistent with its standards and propositions. It is also entirely within the province of a sale management to discriminate against consignors who are known to be untrustworthy. The public sale is not a matter of sentiment. It is a matter of business, a matter of good faith, and a matter of public service.

These factors are not antagonistic; they are entirely consistent, and in fact, a sale which does not give due weight to all these will never become a trustworthy institution. I will go further and say that, inasmuch as the managers of sales are as a rule experts, have access to facts pertaining to cattle more than the ordinary, and are responsible for creating an atmosphere of stimulation and enthusiasm in the course of the sale that easily carries people past their best judgment, and in further consideration of the fact that many purchasers are neither experts as to cattle nor thoroughly informed as to the basis of values as represented by pedigree and record, it is incumbent upon the management to protect the ordinary buyer by every safeguard and assurance which can reasonably be invoked.

The sales management which can create in the minds of the public a sense of security as to the integrity of the sale will in the long run outstrip any management of questionable integrity, no matter what the offerings of such management may be.

There may very well be a difference of opinion as to the type of cattle which ought to be offered for sale. It is not my purpose to discuss the type so far as it is represented by appearance, a matter which is obvious and largely a

matter of taste. But when it comes to the deeper facts related to animals, their history as individuals or in the herd, there are certain stipulations which every management should set for itself and to which it should demand that its consignors freely subscribe. Although as a rule the sales management can not be held legally responsible for misrepresentations as to the character of cattle, it is in position so to determine the facts as to lead them to exclude animals which are under suspicion.

There are several factors as to the physical make-up of animals which must be regarded as vital.

First, Tuberculosis: It is noteworthy that arguments which a few years ago it was necessary to put forth and strongly maintain on the subject of tuberculosis in cattle are now superfluous. Practically, the discussion as to the seriousness of this question has ceased. Everybody acknowledges its enormous importance. Questions of methods are still before us for decision, but that it is a problem to be attacked at every angle is beyond question, and that it is hopeful of solution is largely demonstrated by the tremendous improvement which we in this State can see in the few years in which active measures have been pursued. Nevertheless the day has not passed when tuberculous cattle will be offered at public sale, and that with a full knowledge on the part of consignors and often with a full knowledge on the part of the sale management.

There is no language strong enough to condemn this situation. It is not an occasional occurrence, it is a very common occurrence, and public opinion must be so focussed upon it, and the character of the transaction as to its commercial dishonesty must be so indelibly stamped, that any departure from the straight course on the part of either consignor or management should be sufficient utterly to destroy confidence in both.

This is not simply a matter of dishonesty in the individual transaction, it is a matter of treason to the whole livestock

enterprise, and individuals who can not see without pressure the importance of the matter should be made to feel it by every penalty, legal or moral, that the public can apply.

The most important factor in determining the reliability of this transaction is the integrity which includes the capacity of the official tester. The accredited veterinary who can be bought or influenced is worthy of not the slightest confidence in what he presents. The business is full of instances of conscientious testers who are not acceptable because of their unflinching adherence to facts. It is, of course, equally full of instances of men who are preferred for these purposes because they will compromise with the facts.

There is but one solution to this, and that is the determination by the management as to who are capable and honest men and the insistence that all parties shall measure up to the standard set.

So important is this factor, that I am disposed to think that the transaction should be made to turn upon this test and the man who makes it. I consequently question the advisability of selling cattle subject to retest in ninety days, or any similar period.

There should be a limit to the liability of a seller. If he is presenting cattle which he believes to be sound, backed by veterinary examination which he and all others believe to be honest, the liability should terminate at that point, rather than be dependent upon subsequent retest. The guarantee for a period of time tends to lessen the vital importance of the primary test, and I believe the importance of the primary test should be emphasized to its fullest extent.

In case fraud can be shown as having entered into the primary test, the buyer has as full legal recourse as though there were an extended guarantee, but it has seemed to me that the extended guarantee is nothing but an advertising makeweight and that it has not at bottom sufficient justice to make it a primary stipulation, as a rule, in the sale.

When the management of a sale takes an unequivocal

stand upon this question of tuberculosis and demands that there should be no suggestion of quibble, and if, in addition, it exposes for public scrutiny the cattle test papers of a fully accredited tester, it has, in my judgment, performed its full duty. Devices of an extraordinary nature, in the way of guarantees which are not sufficiently sound to become universal, weaken rather than strengthen the general proposition.

Second, Contagious Abortion: No single calamity can befall a herd as important in its immediate bearings as contagious abortion. This subject is fraught with utmost seriousness and difficulty. Contagious abortion is extremely widespread in the dairy world. All of the older dairy regions are more or less permeated with it. Practically nobody escapes it indefinitely, and the immediate loss involved, together with the extreme difficulty and uncertainty of its management, place it as one of the calamities to which the breeder is subject. Fortunately, it is for the most part a self-limited trouble. All experienced men are familiar with its outbreaks and are familiar with the fact that spontaneously, in the course of two or three years, it clears up.

It is not my purpose to discuss its nature or its management. It is my purpose to insist that the man who intentionally puts into a sale, or the management which knowingly permits in a sale an animal actively carrying contagious abortion, is a criminal.

The practical application of this idea, however, is not entirely simple. Although it is perhaps true that scientific methods can determine contagious abortion from accidental abortion, these methods are not sufficiently recognized and the facilities for using them not sufficiently widespread to make it thus far a practical safety. The least, however, that can be demanded is that the facts with reference to a cow shall be stated. If she has calved abnormally, or failed to calve, or if there is any other phase of her

breeding that is open to question, the facts should be demanded by the management of the sale and fully set forth.

With all the facts presented to the public, it is reasonable to agree that the buyer may estimate his risks and take his chances, but without a full statement of the facts, the most expert buyer is without any protection and, if subjected to the risk, which he would not naturally assume, he is the victim of contemptible fraud.

Bear in mind, this is not a simple question of an honest transaction. It is a question of reliability of an institution which we are trying to build up for the purpose of promoting this greatest of industries, and anything which tends to weaken its foundations is treachery to the whole industry.

In addition to the foregoing, most of the questions as to constitution and as to other peculiarities of the dairy cow are reasonably subject to judgment from inspection.

There are, however, specific flaws as to feeding peculiarities and milking peculiarities which can not be known except by experience. In a private transaction, it is a simple question of honest dealing. In a public sale it is proper that these matters should be made the subject of the most careful inquiry and discrimination by the management. There are limits to what a management can find out and know. There are questions as to what the motive of a consignor may be, but accepting all of those qualifications, it is perfectly sound sense to demand that every defect which a management can determine in advance shall be specifically set forth before a sale is consummated.

It may be objected that in making these demands we are establishing an unreasonable standard of guaranty; that after all, a public sale is not for the purpose of furnishing a market and not for the purpose of protecting its buyers.

My answer to this is twofold: First, that it is not a normal market but a strictly artificial market to which the public is attracted by the character of the management and the reputation of the community. The buyer and seller are not

upon equal terms, but by reason of the rapidity of the transactions and various features inherent in the auction business, opportunity for careful examination and mature judgment are lacking, and in a transaction where definite knowledge and deliberate plans are on one side, and hasty impressions and competitive bidding on the other, every possible means whereby the parties to the transaction can be put upon an equal footing as to foundations for judgment, must be reasonable to demand. Moreover, public sales are dependent upon buyers and buyers are not indefinitely gullible. In the long run the public sale will be a permanent institution just in proportion to the safety which buyers may feel in regard to the fundamental honesty of the sale.

Although this argument appears to be for the benefit of the buyer, a moment's reflection shows that ultimately it is the salvation of the seller.

A man who conducts a farm, sells his produce to his herd for the purpose of selling his increase at their full value, needs a reliable, economical, stable market.

It is a prevailing opinion that the public sale at stated intervals will furnish that market, but I go back to my original proposition, that the essence of that market is its character; that the strength of it, is confidence; that the test of it, is experience.

There are other factors with regard to the public sale of great importance, though perhaps less essential.

First of these, I would enumerate mercantile squareness. Shall a man be permitted to bid against his own cattle even indirectly? By-bidding is generally condemned as a dishonest practice. Where it is secretly done it is distinctly fraudulent. Has it been eliminated from our public sales? Every one who is familiar with it knows that not only has it not been eliminated, but that variations of by-bidding, in the way of elaborate schemes for increasing values, have happened to a scandalous extent. Can the business end of the public sale survive this crookedness?

It matters not how high the quality of the offerings, nor how great the reputation of the sales management, a deal which is commercially crooked tends to ruin the business, and there is but one remedy for it, which is publicity.

Many other things I might take up of minor importance. The preparation of cattle for sale, their sanitary surroundings, and all the ordinary factors of good management, but lack of time forbids me to go into them.

I have chosen to concentrate my attention upon the public sale, in the belief that it is an institution of value. Influential breeders are not all satisfied, however, that it is for them desirable.

Here and there, public sales by individual breeders will be held. This, however, does not apply to the rank and file of the industry. The majority of breeders are dependent either upon private sale or the consignment sale.

For many reasons the consignment sale is preferable. The simple question is, can it be made trustworthy? I have sufficiently indicated the obligation which seems to me to rest upon the managers of the sale. Square-dealing men will need no pressure. Human nature, however, is to be reckoned with. The ultimate control in this matter will rest with the consumer—the purchasing public. The key to the matter is publicity. Let us not, as farmers and breeders, quietly submit to repeated imposition.

If a sale is of high standard, honest as to quality and methods, let it be strongly patronized.

If a sale is questionable in its methods, let it be shunned. Let us call a spade a spade and justify ourselves in the denunciation of that which is untrustworthy, not only upon abstract grounds of morality, but with that enlightened selfishness that leads us to see that the relationship between the success of our operations and our market is immediate and vital.

Delivered in connection with the presentation, by the American Guernsey Cattle Club, of a portrait of William Dempster Hoard to the Saddle and Sirloin Club, on the evening of October 29, 1914, in the Banquet Hall of the Stock Yards Inn, Chicago.

Printed specially.

ACCEPTANCE OF EX-GOVERNOR HOARD'S PORTRAIT

IF there is great hesitation on my part in accepting so agreeable a duty and so noticeable a distinction as is offered me this evening, there is a reason, and the reason is a sense of inadequacy, a sense of distrust in my ability to walk just the line that I ought to walk in this matter. If I were to say all that is in my heart to say on this subject, I would say too much, and if I say only enough for the occasion, I shall not have said half the truth.

My feelings in this matter are deeply personal, as well as merely official. I have traditional relation to Governor Hoard, born with respect and affection for him—family tradition, neighborhood tradition. I may say, incidentally, that he was an intimate companion of my father's generation, of his brothers particularly. Two of my father's brothers, with Governor Hoard, and four others, formed the first Dairymen's Association of Wisconsin. Soon after that—not so soon, but while I was hardly more than a boy—I became, when Governor Hoard was first elected Governor, his family physician. The relationship was not that of physician and patient, it was that of a young man deeply impressed with the valuable friendship of an older man, and Governor Hoard is one of the few men I have ever seen with whom I could associate half an hour at any time and always learn something. And so, as time went on, and I traveled along in that commonwealth, more or less intimately with Governor Hoard, and always with my eyes fixed upon his career, I have seen him take a position in

that commonwealth—politically at that time—that was always significant. I have seen his triumphs and I have seen his failure, if one may so call it, politically, always on the basis of principle. And the only defeat that he ever had was a defeat upon principle. And so, as the time went on and I grew older and grew away from that locality, always that friendship has been maintained, always that relationship. So you can see that I come to this situation with a sense of personal interest that few people could have.

In more recent years, as my interests came to be changed, and I began to have a fundamental and increasingly deep interest in agricultural affairs, I saw that all my early estimate of Governor Hoard was far short of its true level. I began to see, as I came to figure the various things that go on in this country, that although we had in Wisconsin statesmen, men of affairs, men of breadth, and power, and influence, and insight, that most of them were really superficial in comparison with Governor Hoard; that the statesmanship of Governor Hoard, as Mr. Marsh has so aptly stated, just outside of the limelight, was the statesmanship of our foundation; that whereas other men were dealing with the framework of our social structure, he was dealing with its sources, its foundations, its cornerstones. And so, as my familiarity with his work increased, and as I came more and more to follow the lines of his influence every year, I have come to see more fully that his influence is not to be measured by Wisconsin, not to be measured by the borders of the West, not to be measured by the confines of the United States, but that his influence has reached the world around, wherever a community is sufficiently enlightened to realize that agriculture is its foundation and wherever it is sufficiently specialized to see that, of all the branches of agriculture, dairying is the most important.

Therefore, I have come to feel with regard to Governor Hoard that he is a man of the broadest statesmanship, and I have yet to know, in casting over in my mind all of the

public figures of this country, I have yet to realize a man whose influence upon the welfare of this country has been greater than that of Governor Hoard.

That being the case, the question is always before us, how has he done it? and I say he has done it by devotion to a cause; he has done it by patience, insistence, dogged determination to go on and on until he accomplished what he was at, and never has he compromised. And so, although we can see in this same agricultural world and although we can see in the dairy world great figures, men of great influence and great power, after all, here is the man who has carried the key to the recesses of the closed mind in this country. He is the man who has carried the torch that has fired men's souls, and this is the man that we must acknowledge as leader in the whole realm of agriculture and dairying thought in the world.

The Saddle and Sirloin Club honors itself in accepting for a place upon its walls this portrait. Always it has held in highest esteem, in great appreciation, Governor Hoard. Only now has it come to the point where it includes his portrait in its gallery.

You may wonder why it should be interested in a portrait for its gallery. The Saddle and Sirloin Club is not a mere social convenience. It is more than that, it is a clearing house for agricultural thought, and more than that it is an educational institution. Thanks to the great vision and insight and inspiration of Mr. R. B. Ogilvie, who is really the father of the Club and the originator of the idea of the gallery such as we have, this movement has gone on and on, not as a decorative feature, but as a feature of perpetual education to the breeders and the agricultural men generally in this country, with the hope that it will go on and on and that its usefulness as an educational feature has only just started. For that reason, the Club welcomes the gift of the American Guernsey Club of this portrait of Governor Hoard and receives it with gratitude and thorough

enthusiasm, feeling that no place that is filled by a portrait upon its walls will be more distinguished, more highly honored, more absolutely appreciated in the future of our great industry than will this place in which appears the portrait of Governor Hoard, and, on behalf of the Club, I have to extend to you our heartfelt thanks.*

*Through the generosity of Mr. John A. Spoor, an excellent portrait of Dr. Favill, painted by *Mr. Arvid Nyholm*, was presented to the Saddle and Sirloin Club in the summer of 1916, and hangs in its gallery.

Delivered before the Eighteenth Annual Conference of Agricultural Extension Workers, Purdue University, LaFayette, Ind., November 22, 1914.

PROBLEMS OF THE DAIRY INDUSTRY

IT is a very great pleasure and privilege for me to be here to-day. I almost hesitate to follow the logic of Professor Hunziker and the enthusiasm of Professor Christie, for fear of spoiling it, but the situation needs, more than anything else, inspiration, and inspiration is made up of ideals, imagination, and energy, and these have been presented to you to-day in these talks in such a way as almost to make it desirable that you shall go away and think about what has been said to you already, without further comment.

I have not been given any special subject to-day. I was told to say what I wanted to say. It is a very dangerous thing to have said that, for there is so much I want to say. I probably have taken my professional life in my hands in coming here, as I frequently do. I have depended on the fact that I am a doctor, for a livelihood. I have had friends that were frank enough to say that that was probably the reason I was a farmer on such a scale, because I was a doctor. Be that as it may, when I registered with the young lady to-day who gave me the card, I wrote down, "Occupation—Physician. Chief Interest—Agriculture." How is that going to sound in my practice? I do not see that there is anything to do but face it. Perhaps I am excusable because I am a pretty old man in the practice of medicine, and perhaps it is time that I should get out.

The fact remains, however, that my chief interest, as far as human interest lies, is in agriculture. That is why I am a dairyman, because I see, or think I see that the future of agriculture, which means the future of this people, is to a very great extent bound up in the subject of dairying.

Now, you know that, all of you. A very large percentage of the people with whom you come in contact know that. You do not have to have me talk here about rejuvenation of our work out in the wheat fields by means of stock raising and particularly dairy cattle raising. You do not need me to point out the wastefulness, the unthinking blundering along the line of depressed fertility. You know that. But, my friends, bear in mind that the people at large do not know that. Intelligent farmers know it, semi-intelligent farmers respect it, but the mass of people that make up public opinion in this country do not know it.

The simple question before us is, how are they going to know it and what is our function, yours and mine, with reference to the dissemination of that information so broadly, so effectively as to make it the conviction of the American people that what they regard as their greatest asset, namely, their agricultural preëminence, can be conserved only through the legitimate development of their stock husbandry, and particularly their dairy husbandry. How are we going to bring it home to them so that all the people know what you and I know? Until all the people in some degree know enough at least to mold public affairs, we are in jeopardy.

That is why it is worth our while to round up once in a while and re-awaken our consciences, wake ourselves up, not as to what we know, but as to the degree of influence it is incumbent upon us to exercise upon this subject. How do I know that people do not realize this thing? In a general way we all know it, but take some specific instance. Did you ever try to talk to a man who does not know anything in particular about the subject of oleomargarine? He never fails to make the statement, "You do not want competition." That is the attitude of the general public on the subject of oleomargarine. I am not now discussing whether it is good, bad, or indifferent as a food. The attitude of the average business man is that the dairy interest

in this question is a selfish interest of competition. Until that average business man can be made to see that the future of this country lies in its agriculture, that the future of agriculture lies in its dairying, that the future of dairying lies in an honest, unhampered market, without the handicap of illegitimate competition, mind you, I say illegitimate competition, until the average business man can see that clearly, the dairy business is in danger, agriculture is in danger, and the people are in danger. It is a question of national preservation. You understand that. Does the public understand it? If the public does not understand it, whose fault is it? It is yours and mine, and it is of fundamental importance that they know of the only way in which our agriculture can be preserved.

I am going to pass those generalizations as to the importance of dairying. I am simply calling your attention to the fact that it is your duty to disseminate this conception of the bigness, the importance, the vital character of this question to the American people. When you come to that proposition, the question of trade competition and selfish interest fades away in the enormous values that are inherent in the fundamental question of national prosperity.

There are other things that I want to speak about just in passing, and one is with regard to the character of farming operations of various kinds. I am not coming here to throw any kind of discredit upon the co-called "grain farmer." I do not know where we would be without the grain farmer, or any other class of farmer, but I want to call your attention to the logic and the psychology in the farming business, in a measure. Any business gains in its intellectual returns, in its interests, in its attractiveness, just in proportion to its complexity and just in proportion to the amount of mental effort that it takes to handle it. When you introduce into the question of farming, the element of superior intelligence, the element of plan, the element of purpose, of long-continued intellectual and

persistent line of effort, just the minute you put a business, farming or any other business, on this basis, just that minute you begin to make it attractive to the people that have money. Just as long as it takes a mind to run a business, it will attract other minds to it, and the future of agriculture is right now playing before me.

We are on the verge of the age when the great intellectual pursuit of this country is agriculture. I know it, and you know it if you have thought of the various phases of the subject. It takes more money, more plans, more courage, more imagination and inspiration to be a dairyman than to be any other kind of a farmer, and that is why it is to be so preëminent as a phase of farming in the future.

There is another thing that I want to call your attention to outside of that. It has been mentioned here to-day that farm living conditions are an important consideration. They are of vital importance. I have had interests a little outside of this, at least from another angle. The National Education Association has assumed within the last few years the responsibility for the hygiene of the schools, and in looking over the field, it has settled upon the question of rural sanitation, the question of sanitation of the rural schools, as the thing most in need of attention. When you consider the vast body of teachers that are involved, and the vast number of children involved, it is a vital question. Unless they get the coöperation of the district, unless they get the coöperation of the individual farmers, and unless they get the coöperation of the individual farmers' wives, they are not going to be able to accomplish this tremendously needed reform in the way of sanitation of country schools. It comes down to the question of social leaders in the rural community. It comes down to having somebody to point the way. There is nobody so in position to enter into this particular phase of the proposition dealing with the well-being of the farming community as the County Agent. The County Agent is to be the solution of many

difficulties and primary among these difficulties is getting into action the obviously good but dormant motives that are behind the country community. It is the County Agent or somebody corresponding to him, that the National Education Association must look to for the effective touch, just as it is absolutely proved that the Agricultural Experiment Stations must look to the County Agents for the final translation and interpretation of the results of their work in the minds of the people.

For there is no class in better position to appreciate the very essential principles of living conditions, good hygiene, sanitary things involved in their operations, the way they produce their milk, the way they rear and keep their animals, the way they feed them, and the way they keep their animals from disease. All of these questions concentrate their minds on health and wholesomeness. That is the kind of a community which is going to make the greatest advance in regard to sanitation and health.

There is another side of this dairy question which I must call attention to. You would think from the fact that everyone uses milk in some degree or other, that everybody uses butter in some degree and a good many people use cheese, that the understanding of the people as to the value of dairy products was pretty well established. You would think that they knew about this value and that they are probably in harmony with that situation. Well, nothing is farther from the truth than that. So far as the use of dairy products is concerned, the people of this country have not yet crossed the threshold of intelligence. Everybody uses butter, perhaps not so much as he ought to, and perhaps this is an important question. The people, however, that use milk, do not use milk in one per cent of the population as freely as they could use milk profitably from the standpoint of health of their families.

People do not understand about milk. It is a matter of investigation in my direction and I know that people are

habitually skimping themselves on milk, under the general impression that it is expensive, under the general impression that it is a luxury. They are using milk for their little children because they know their need, but they are regarding it all the time as a luxury. Now, you know, and I know that we need for the rearing of any young animal a certain amount of protein material, or nitrogenous foods. We have got to have it. Children have got to have it in order to make them grow, just as animals must have it.

But, what are the children getting for the most part for their protein ration? Why, they are getting a little bit of milk here and there and almost anything else that will fill the bill. They are getting, not only food that is not good for them, meat for example, among some classes eggs, etc., but as a rule they are getting the kind of protein that you buy in the shop somewhere. I do not hesitate to say from a medical standpoint that it is bad for them. I do not hesitate to say that the less meat children get in the early period of their lives the better off they are. They must have protein, but where are they going to get it? You and I say, *milk*. The people say, "What relation has milk to this question?—we must give them *strong* food," not knowing at all that there is this correspondence in nutritive value between milk and meat, not realizing that when they are giving their children milk, it is the equivalent of meat, except that they are giving them something better for them.

Milk as a food in its larger aspect has not yet dawned upon the public. It is of paramount importance that it be fixed, because the market has not yet been touched upon the subject of the value of milk. They say they can not afford it. There, again, they do not know. It is utterly foreign to the housewife's mind, the idea that milk, unit for unit, is cheaper than meat. They do not understand that and consequently they are moving along without any understanding of the fundamental relationship of milk and

growth, of milk that is open to them cheap, the cheapest nitrogenous food there is, without any understanding of the fact that they can bring up themselves and their children, feed, maintain, and grow them on milk, at a very much cheaper rate than they can in any other way. They do not understand it and it is up to you and me to see that they do understand it. It is a great deal better for them. I may say in passing that the only known protein food that contains all the elements necessary for animal growth is milk. That is the reason to prefer milk for growing animals.

I was speaking particularly about the question of economy and that is beyond any question to be found in the utilization of milk instead of the utilization of other high-priced protein foods.

There is another side to this question. Everybody does not want to drink milk all the time, and many do not realize that there is any other way to use milk except to drink it fresh. I am now coming to the question of the economy of the farmer that has milk from a few cows and has the product to dispose of. What is the difficulty to-day with the farmer who has from six to twenty cows that he milks twice a day? I repeat, what is his difficulty? Is it not the fact that he has a perishable product which he has got to get rid of then, at whatever price he can get for it, or lose it? Is not that the fact with reference to the dairyman? In other words, is it not the perishability of his product? You must agree to that.

Now the question comes, is there any way to meet that situation? Is there any way to so reduce the perishability of milk product so that the markets that are organized can not juggle it out of existence? We have got to meet it. I do not have to meet it, because I do not sell market milk. Did you ever stop to think, gentlemen, that cheese is the cold storage of milk? Did you ever think that the way to take the perishability out of milk is to turn it into cheese? Of course you have, but the people at large have never

really thought of it. Do they realize that they can drink at so much a quart, and that they can eat cheese at so much a pound? The consumption of cheese in this country is nothing to the consumption of cheese in the older countries that have to be economical. We are not using cheese as a food; we are using it as a dessert, and as a side issue. From the standpoint of national economics, until a slice of cheese is inserted in the workingman's basket, instead of a slice of meat, we are not coming anywhere near the consumption of cheese which we ought to have.

I sound as though I were making statements that I could not substantiate, but you know that what I say is true, and that the question is how to increase the market for milk products, not of the fresh variety but of the storage variety, to stimulate the mercantile interests of this country to furnish that kind of storage, so that the milk shall be available, not 24 or 36 hours after production, but 24 days, or six months, or a year afterward.

A far more important question than the butter factory is the cheese factory and we must see that this comes to pass. Well, how is it coming to pass? How are we going to stimulate the people at large in the use of milk products on the basis of health and economy? How are we going to do that? That is the question. Well, I will tell you something that is going on, and I will have to be a little bit personal because it happens to come this way.

The National Dairy Council has brought into its membership all the interests of dairying in the country, as the preamble of its constitution states, "all of the interests dependent on the dairy cow." Now, what does that mean? It means the milk dealer, the milk producer, all the butter interests, all the cheese interests, and all the condensed milk interests. Is that all? Not by any means, that is the smallest part of them. It means all the machinery interests, all the feed interests, all of the people who are furnishing equipment for the dairy barns, and before you get through

with it, you will find incorporated the largest single interest in the country to-day represented in this organization, known as the National Dairy Council. They are all in. You can see how important it is without very much discussion, to get all of those interests together. You can see that hitherto they have more or less been pulling apart, cutting each other's throat, and there has always been a more or less strenuous feeling between them and that it is of the utmost importance to get them together.

Now, what is the first move they are going to make? Here and there their efforts go out individually, but the first move they are going to make is this: a systematic, well-planned, nation-wide campaign of advertising for the purpose of increasing the use of milk products. That is the first effort that is going to be made by this new Council; an effort to increase the appreciation and hence the use of milk products. Those who know, who have followed the history of advertising campaigns, particularly with reference to food products, believe that the use of milk products,—raw milk or commercial milk, butter, condensed milk, ice-cream, milk powder, and all of the things that are legitimate milk products,—can be increased from 50 to 100 per cent by a campaign of education, by a campaign of advertising, setting forth the facts as they are, so plainly, so broadly, and so insistently, that everybody can see what we see and nobody will be without that information.

If that is true,—if it is true that publicity can bring the use of milk and its products into such prominence that it will spring forward in demand, what are we going to do to meet this? We are going to meet the keenest milk market, the keenest demand for milk products that has ever been known in this country. The dairy business is going to be established as has never before been equalled, and we believe that it can be done. That is the future of the dairy business. A campaign, not of farmers or the Institute workers who know it all now, but the campaign

of education to the people at large as to where their interests lie in this milk question.

I want to ask you frankly just one question here:—Supposing that it should come to pass that we should find an increase of 70 per cent for milk products—as they found a 70 per cent increase in the demand for oranges under a similar campaign—who is going to furnish the milk products? That is the difficulty which we are up against. Who is going to furnish this material? Just at this time this year, we have a little surplus of milk that is due to local conditions. The tariff has knocked out the condensed milk business almost entirely. That has got to be fixed some way. In the second place the season has been one in which the ice cream business has gone to pieces. The ice cream has not amounted to anything, and consequently for all that mass of milk which has been used as a foundation to ice cream, all of that demand has been practically cut off. In the third place, we have such a flush of pasture that we have had a larger supply of milk than usual. The result is that we have more milk than we need. That is just temporary, it is not going to last.

The fact is that we have not nearly enough milk to supply our legitimate demand when we make that demand. The intelligent demand for dairy products should not come before the milk supply of this country will be equal to what it ought to be. It is the work of the people to see that the supply goes right along increasing, and that our agricultural districts have their original fertility. We could not supply the milk to-day if that demand were on us.

There is n't any where near the milk produced to supply the demand that there is going to be. What are we going to do? We are going to increase the dairy business and we are going to increase the economy of the operation of dairy business. We are going to see that the cows become economical and profitable cows. But, how many cows do you think there are in the United States that are

not economically justified? The estimates are from 25 to 40 per cent, but there is no question that there are multitudes of cows milked twice a day, eating feed that they are not paying for, according to the milk they produce. What are we going to do about it? We talk about our cow testing associations measuring our product by the pound, our scrupulous care in weeding out the poorer cows, because they are not profitable, and so forth. It is hard to say what the result would be towards the general milk situation and it is very hard to say that we can afford to kill off wholesale all those cows that are close to the margin of profit. I suppose that there *are* cows that are bad enough to be killed, but there are many cows that milk close enough so that we can't afford to spare them. What good are they, if we increase that kind of cows? There is the whole point.

If it be true that a mediocre cow, an unprofitable cow, can not produce with the right management a calf that will grow up into a better cow, then there is no use in permitting the life of such a cow to continue. But, you know that is not true. Crossing good bulls on inferior cows has built up good herds. It is the very essence of this question that I am now propounding for our milk supply.

Bear in mind that we are not going to deal with the question of our increased milk supply from the standpoint of big herds with sixty or seventy cows. We are going to deal with it from the standpoint of the farmer with from three to fifteen cows. That is how we are going to deal with it. Bear in mind that I am not going to defend the border cow, but, if she is reasonably hopeful we do not want to kill her, because it is possible for the next generation to be better, and we want the next generation to be brought upon a better basis.

It comes down to the question of what the average farmer is going to do about it. "What is the use of my having a good bull? Anything will do." That is a hopeless situation, and the sooner he is brought out of it, the

better for himself and everybody concerned. But if he says "no" and has a fixed plan in buying a bull that is good enough, he should avoid the mistake of buying too good a bull which may happen if he forgets his cows. He wants a good herd, but it can't be done without an intelligent introduction of promising blood into that herd. The hardest problem before us to-day is to persuade the ordinary farmer with inferior cows that it will pay him to get a bull that is good enough to go into his herd. You know that.

Don't you see that with our campaign of education for a larger demand for milk products should go an educational campaign for a larger production, because, if we get a demand twice as large as now, and the production is not increased accordingly, the price of the product will soar, and when the price goes beyond a certain amount, it tends to cut off the use of the product? Forty cents a pound for creamery butter is a bad thing for the dairy business rather than a good thing. You know that there is a certain price at which the public will buy, and up to that price it is a good thing for the farmer, but the minute the price goes beyond that price, the consumption of the product begins to fall away and it is a bad thing for the farmer. If it goes beyond the point where the supply is adequate for the demand, so that the price goes up, consumption falls away and your last condition as a dairyman is worse than the first condition. So, unless your campaign for better herds, better cows, and better breeding goes hand in hand with the campaign for a larger use of milk products, your last condition is going to be worse than your first. Don't fail to see that.

That brings us to the question, what are we going to do with the ordinary farmer that does not see the point about having a good bull? I said a minute ago that it was just as bad a mistake to get too good a bull as to get too poor a one. I meant that. I want to bring you, if I can, into my frame of mind on this question of breeding dairy cows. I take your time to do it, because I don't think all people

see it as I do. I have talked about it to old breeders and very intelligent men who don't see it.

It is this,—the purebred business has no justification under the sun except for the influence it can have upon the grade business. Now think about that for a few minutes. The gradesmen look at the purebred men, at the great prices, at the great sales, and the whole make-up is to them spectacular. They say, "That is all right for the purebred men, but it does not interest us." Until every grade man can come to see that the purebred business is in existence for his benefit and for no other purpose on earth, he is not in the right frame of mind. There is not any justification for the purebred business except to breed bulls that can go on in the grade herds and make them better, and if they don't do that, they are absolutely failing in their mission and have not touched the purpose of their existence. Let us think of this for a while.

The purebred men do not see that. They buy and sell among themselves, they get a great big price and the cows make big records. When they are dealing among themselves they do not think what their ultimate purpose in life is.

It goes without saying that a great, big, high-priced bull ought not to go in a grade herd unless the herd is worth it. I am not stopping to discuss the value of bulls, I am not stopping to discuss what their bulls are worth because it is quite likely that from some points of view, the bull is worth a great deal of money. Bear in mind that a purebred business is a pedigree business. I don't know just how valuable any given animal might be in a given herd. A given bull may be worth a great deal of money. I am not concerned with that.

If a bull is too high-priced and really too good from a certain standpoint for a certain herd, that does n't mean that his son is too good or his grandson is. There is going to be a good bull somewhere that is going to bring the

herd out of its mediocre rut and will not be too expensive to use.

Distribute good bulls on the common herds in the country. It is a pretty difficult thing for people to do that in the purebred business. It is not an easy thing for me to make a campaign for good bulls and get them distributed over the grade herds of the country by persuading grade men that I am solely interested in them as breeders of better cattle. A grade man will say, "If he is interested in me, why does n't he give me a bull?" I did do that last year. Last year was a bad one for us in the bull business. Up at Lake Mills, Wisconsin, where my breeding goes on, it is a great Holstein country. All my bulls are worked off by people passing through that section of the country. They are worth from \$150 to \$200 and they go off to grade herds. Last year I must have had twelve yearlings left, and I never had a yearling on the place before. I did n't know what to do with them. Well, I have a cousin who is interested in grades. I wanted to send these yearlings on to Chicago. He wanted to ship them to Chicago for beef. I would n't do that. I thought the matter over. Finally I decided to distribute them on the grade herds, and then, after they had done all the good they could, my cousin could beef them and take what there was in them. If we can't sell our bulls, we ought to give them away. It is better for me to give my bulls to my neighbor than to have him drag along and not improve his cattle.

But after all, all joking aside, don't you see that the real gist of the matter is right there; that we must improve the herds of cattle in order to be able to meet the increased demand, if we are going to whip up this demand? It is the small herd that is in question. We can improve those only by good bulls. Who is going to distribute them? It seems to me that the only possible way in which this is going to be solved is by having some disinterested party,

like the County Agent or some other agency who will make a census of the bulls that are available, list what they are really worth and in some way or other create a market that is good enough. Find some kind of place where a farmer can get a bull good enough for his purpose and at a reasonable price, and some place in which he will have confidence.

One of the greatest questions before us to-day is how to establish a machinery for the distribution of the purebred bulls on the grade herds in this country. There is one difficult part of this situation. It is almost impossible to tell how good a given individual may prove to be. There is a certain gamble in this, and nothing can solve it in advance. The only thing to do is to consider your foundation, your breed, the bull's ancestor and in general take chances. That is the one point that we must face. It is almost impossible to tell what any particular animal is going to do if he is going to be a success. But aside from that gamble, aside from getting a bad bull as far as conformation is concerned, there is no risk whatever in some disinterested agency distributing to the farmers bulls that are good enough to insure progress on to a better and to a larger prosperity.

Now to sum up all the points: In the first place, the need of our agriculture, then the absolute dependency of our agriculture upon dairying; the need of our influencing people, so far as their health is concerned, on dairying; the absolute need for giving them the important information as to the value of dairy products to create a demand, and then, the absolute necessity of having a supply for that demand; and finally, the fundamental problem of increasing and improving the average cow production of this country so that it shall not only be economical in performance and adequate to meet the demand, but that it shall be an upward step in the general upward progress of the dairy cow which shall know no limit.

Delivered, First Annual Meeting of the National Dairy Council, Chicago, November 5, 1915.

Printed specially.

THE CALL TO ARMS

IN setting forth the reason for the call of this unusual gathering of men, it is well to regard briefly the history of the National Dairy Council, the body which has assumed responsibility for this gathering.

During the National Dairy Show of 1913 there was a gathering of men representing all the prominent branches of the dairy industry, the majority of whom were delegates selected by the representative organizations. At this meeting, after full discussion, there was created a National Dairy Council, which at that point was regarded as a circle within the National Show.

As then conceived, its purposes were vaguely defined. The general idea underlying its formation was to promote more intimate acquaintance and opportunity for freer discussion and promotion of the interests which are found to be common within the industry.

As time went on the various inter-relations became better defined, and it was found that there are many questions and problems facing the dairy industry which point logically to better organization and closer coherence of all factors in this enormous field. Whereas at the outset the predominating idea was internal harmony and furtherance of a forum which could be regarded in the light of a clearing house for all subjects germane to the industry, but more particularly within it, it developed clearly that there is still greater need for such organization as will enable the industry to fortify itself in its general commercial relations.

Many matters of serious import became distinctly issues for consideration, and culmination occurred at the time of the 1914 Dairy Show, when the appalling menace of the

foot-and-mouth disease, with its ensuing campaign of eradication, including quarantine of the cattle at the Dairy Show and all the problems legitimately arising therefrom, precipitated upon the consciousness of all people related to the industry, a conviction that dairying as a factor in national prosperity is dangerously unprepared to cope with the natural vicissitudes and perils which can arise to threaten an industry so fundamental, so colossal, and so unorganized.

Accordingly in the spring of 1915, the National Dairy Council was reorganized, separated in form from the National Dairy Show and established upon a basis of activity which contemplates incorporation into one body, so far as circumstances may demand, of all interests which are solely or largely dependent upon the dairy cow.

It is the aim of the Council to bring into its organization to the largest possible extent the men who produce the milk, who manufacture milk products, who provide materials, machinery, and transportation, who provide a market and facilities for distribution, and finally the officials, administrative or educational, whose counsel and official functions bear so vital a relationship to the ultimate estimate and value of dairy products furnished for public benefit.

To this end an effort is made to enlist farmers and educators, distributors, machinery men, manufacturers of butter, cheese, machinery, feed, cement, milk dealers, and health officials. It is hoped that coördination may be effected with the state agricultural stations, the National Department of Agriculture, and so on through all the list of cognate branches of public service, with full realization that in the last analysis there is no conflict of interests; on the contrary, such community of interest as must be recognized and conserved in order fully to advance an enterprise upon which more than upon any other foundation rests national prosperity.

The Dairy Council recognizes that the essence of its campaign must be education. On the one hand, education of the people whose business interest is immediately involved:

1. As to the importance of their product.
2. As to the inherent weakness of their commercial status.
3. As to the progress of time which demands eradication of essential defects in methods, quality, and value.

On the other hand, education of the public as to the true estimate which should be placed upon milk and its products in the domestic economy of the country; and finally dissemination through all available channels of the idea that the future of American agriculture is indissolubly bound to animal husbandry, and, as the matter unfolds, more than upon any other branch of animal husbandry does it depend upon the progress, development, and value of the dairymen.

At the very foundation of this structure stands the man who produces milk upon which the entire industry depends. His position is one of peculiar precariousness. On the one hand, his product is more perishable than any other. He is consequently under the necessity of finding an immediate market, and is hence open to the influence of accidental or intentional circumstances that leave him peculiarly defenseless. On the other hand his product is subject to such change in quality as to make it of the utmost importance that the condition in which it is presented to the public for consumption shall be scrutinized and as far as possible standardized in order to conform to modern conception of public welfare.

In this serious situation it is imperative that measures looking to the ultimate development of the industry be so widely and comprehensively conceived that the problem involving the milk producer shall be regarded not at all as his problem, but a matter in which the whole nation is directly and indirectly involved.

Unjust or unintelligent warfare upon the milk producer imperils not only the interests directly involved in the industry, but still more vitally the interests of every individual dependent for his daily food upon milk or its products.

The National Dairy Council aims to bring into this grave situation deeper understanding, more harmonious action, and more profound realization of the fundamental importance of the entire subject. Amongst the problems which present themselves for immediate attention it has chosen to regard as most important the widespread ignorance on the part of the public as to the essential value of milk.

When one considers the fact that it would be practically impossible to rear the young of the nation without milk; that some form of proteid food is absolutely essential to the growth and maturing of young animals, and most important of these, children; that milk is the cheapest form of animal proteid food that is to be had; that it is the only animal proteid which contains all the elements necessary to growth and development; that its various products in its more permanent form as butter, cheese, condensed milk, ice cream, and milk powder are cheaper and better food than any other available—it is high time that the public should be brought to a realization that milk is not a luxury, but a necessity; that it is not expensive, but relatively cheap; and consequently that, by thorough organization of the point of view of the public, an enormously greater and more stable market can be created which will stimulate and encourage larger production and higher quality at every point.

It is common knowledge that there has been in this country this year a surplus of milk. Are you disposed to question why try to increase the supply? Let me answer by another question. Does any thinking man believe that there is more milk than the country needs? The answer

is obvious. The country has not been supplied with one quarter its needs from the standpoint of its physical and financial welfare. But there is another profound consideration—we have spoken of animal husbandry as the foundation of national prosperity through its agriculture. What does this mean?

It means that the worn-out farms of New England, of the South, and fast declining fertility of the great West, the highly specialized agriculture of the fruit country, and even the wonderfully fertile farms of the Mississippi Valley are crying for cattle.

There is no way known to man whereby fertility of soil can be conserved and increased except through the agency of animal manure. Only by this means can the enormous yield upon the earth's surface of food material which is not fitted for human food be transformed and redeposited in the land in order to make the land yield more human food.

Every student of agriculture is agreed upon this proposition. But why dairy cattle rather than beef cattle? As things have developed, beef can not be fed except upon a very close margin of profit. Experience shows that it is dairy cattle that build up prosperity of any country.

There are in this country 6,000,000 farms. Every one of them, be it corn, wheat, apple, lemon, cotton, or other product, that is not thoroughly stocked is running down in fertility.

There are in this country, roughly speaking, 22,000,000 dairy cattle, on the average, three or four animals to a farm. A mature cow produces 67 pounds of manure daily, about a ton a month, but on the average less than ten tons a year—sufficient to moderately fertilize one acre. Such fertilization should occur at least every three years. Three cows per farm are hence able to protect the fertility, at the outside, of nine acres.

Does it take any argument to show that the country can not proceed upon this basis? There must be either an

improvement in this situation or deterioration in national wealth.

Let no man underestimate this problem. It is the greatest problem before the country to-day. It is beyond all other questions the one where preparedness is the vital issue. Although this is in general a matter of interest to every citizen, as a specific problem it falls to the people immediately interested to solve it. The danger is that the vast business interests related hereto and dependent on the dairy industry will not see their obligation. I put this not upon altruistic grounds—I put it upon enlightened self-interest.

Hitherto the commercial army, dependent upon the dairyman, has addressed itself to increasing the dairy product and in consequence increasing its own sale of materials to the dairyman. Never have they with any serious or comprehensive effort addressed themselves to providing for the dairymen a market sufficiently adequate to encourage them to larger production, larger number of stock, and better quality. These movements have come from the dairymen themselves.

It is incumbent upon the manufacturing and distributing interests to see to it that there is such appreciation of the value and need of dairy products throughout the consuming public as shall enable the farmers of this country to protect themselves by carrying more live stock, and in this way—and this way only—protect the country against impoverishment.

Let every man, no matter which his branch of industry, realize his personal relation to this need. There is no industry here represented so remotely and indirectly related to this matter that it will not profit by a wise campaign. It is true that the campaign will cost money—a great deal of money. It is true that those who do not contribute money will profit equally with those who do contribute; but the time has come when men shall act in this matter

ethically, which means coöperatively and with a purpose fairly to share the burdens involved.

It takes no extraordinary intelligence to recognize that the returns in actual profit will be multiplied many fold, no matter what the initial cost.

In consequence of this reasoning the Dairy Council has decided to lay before you representatives of all phases of this vast industry a plan to promote the use of dairy products through a campaign of publicity, which shall be countrywide, thorough, and intensive. It has invoked the aid for purposes of presentation of some of the great advertising agencies of the country, and is prepared to lay before you a suggestion for your approval, and action if approved, which shall carry this work on through a period of time, probably for years, in the effort to create public opinion and public appreciation which shall place the dairy industry, and through that agricultural welfare, upon a solid foundation.

At the outset, while the necessity for frequent meetings in the process of organization was prominent, the directory of the Dairy Council was made up of delegates selected by the various branches of the industry whose residence and business possibilities permitted close attention to the work.

It is desirable beyond question that a sufficient number of members of any committee that is appointed to further this campaign of advertising be so located as to be practicable from this point of view.

On the other hand, it is highly desirable that all parts of the country be not only represented, but shall be convinced that they are represented, and by whatever method this body shall proceed, that these factors be kept in mind.

The Dairy Council presents to you this project and asks of you your earnest consideration.

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WHAT SHOULD BE DONE TO PROTECT OUR LIVESTOCK?

IT is wholesome and timely, now that the atmosphere has sufficiently cleared and there is reasonable assurance that a great national disaster has been averted, to reflect seriously and with determination upon the country's experience each according to his lights and each with the purpose of contributing whatever he may to the general maintenance and progress of the livestock interests of the country.

Although the immediate dangers are by no means removed, it is reasonable to believe that the epidemic of foot-and-mouth disease is and will continue to be under control.

The occurrences of the last twelve months have brought into focus, as never before, definite problems related to animal husbandry. It is agreed through all classes of citizens of the United States that the basis of our national prosperity is agriculture. With a sweeping and admiring glance at our unlimited resources, we are disposed to repose comfortably in the assumption that we never can starve.

The few acute analytical students of the subject who are patiently and persistently pointing out the trend of our affairs, have on the whole a small audience. The country by and large is disposed to plume itself upon its agricultural resources.

There is a large foundation of truth under this complacency. As a matter of political economy however, it has neither dignity nor value. Most of the confident assumption in the premises is mere platitude. Only in so far as national policy, reflected more or less accurately in the utmost ramifications of individual industry, recognizes and expounds the intricate interrelations of agriculture and

commercial interests can it be said that the future productiveness of this country is assured.

It is easy for men to magnify the importance of phases of the subject to which they are immediately related. If experience has any value it should teach that the factor of ineffectiveness in the progress of agriculture has been lack of comprehensiveness of view and plan.

It is with full consciousness therefore of the danger of narrowness of view that I approach this question, of safeguarding the livestock interests of the nation.

However great may be the importance of other factors in the complex of our national food industry, it is beyond question that the livestock factor is paramount. Waiving for the moment entirely, the question of their specific production, labor or other contributing factors, farm animals furnish the sole practical means of conserving that part of the earth's product not available for human sustenance and returning this major part of the product to be devoted again to the beneficial use of man through fertilization of the land.

This simplest of truisms to the agricultural student is not common information. Because it is not, the public, upon whose backing every democracy rests, is not the source of strength and safety which its vital interest in the matter would suggest.

It remains therefore for our educating forces, and, chief amongst these, government agencies, to mold the public mind to follow and endorse its investigations and conclusions.

It seems to me then, that the prime factor of safety in furthering the live stock interests in the United States is confidence in the Bureau of Animal Industry.

The agricultural stations throughout the country are of course centers of intense thought and industry; with varying degrees of success they are striving to solve the problems of agriculture. The government should be the distributor of reliable conclusions from these sources and all others. It ought to be true that an utterance from the National

Department of Agriculture should bear such finality as the development of human knowledge permits.

That there is general confidence in the Department of Agriculture is beyond doubt true. That its contribution to the point of view of the public is thus far inadequate is equally true. The educational values of the Department have hardly started toward full development.

It is necessary to realize that development in this direction involves generous expenditure of money. Money is acquired through Congress, and Congress is supported by public opinion. A point of view on the part of the public, intelligent and sympathetic with the purposes of the Department, should be the foundation, not only of organized support but of such recast of official tradition as would make it impossible that political considerations in any way impairing the service could be tolerated.

Whereas practical politics will probably always play its part in appropriation measures, it is beyond measure important that, in this direction, merit and not pressure from any source should be the determining factor. Stability of organization, consistency of policy, and full effectiveness is the demand of the country upon its agricultural department.

If the governments had been adequately financed and their policies beyond question supported by the public, there would never have been material difficulty in carrying out measures of eradication of the foot-and-mouth disease which State and government officials have conducted under such enormous difficulties.

The crux of that whole matter was, and is, and always will be, just compensation to the owners of stock whose property is destroyed for the public benefit. Enlightened public opinion and adequate compensation would have reduced opposition to a minimum.

The second factor, therefore, of importance to livestock protection, is money. Under present conditions, however, even if the foregoing two factors had been satisfactory, there

is an essential weak spot in animal husbandry economics. Effective administration of matters pertaining to health and proper function of livestock involves the highest grade of veterinary service. Under ordinary conditions, veterinary intelligence in this country is seriously insufficient for its needs. Under extraordinary conditions this lack becomes a serious peril. The United States, by and large, is not performing its duty in the matter of veterinary education. Nobody claims that it is. Competent veterinaries could be multiplied many fold to the great advantage of stock raising. I refer now not only to veterinary treatment but far more emphatically to educational work in the direction of preventive measures which with propriety should be regarded as the highest function of veterinary service. The third factor which I advance, therefore, is men.

With this foundation the country would be equipped to render service to livestock interests the best possible under present conditions of knowledge. No tremendous effort to secure coöperation on the part of individual stock owners is necessary if the government be in position fully to meet its opportunity and disposed to do it.

The foregoing discussion relates essentially to the present status and to conditions which must be regarded as primarily an emergency. Assuming that under these exigent conditions it shall have been possible to clear the country of this scourge, there is a further consideration of the most vital importance.

No intelligent observer doubts that the future of animal husbandry is utterly dependent upon wise and consistent plans of breeding. The breeding of purebred cattle bears the same relation to animal husbandry that the breeding of pedigreed seed bears to general agriculture, with this important difference; that the time, money, and efforts required to re-establish a product, which through any agency may have been destroyed, is many times greater in the case of animals.

A plan must be devised, and as to the detail of such a plan I make no suggestion, whereby the purebred industry can be distinguished with reference to destruction under emergency, as a matter of special import. Whereas the owner of such valuable cattle can be adequately paid and thereby reasonably justly dealt with, the nation is distinctly and seriously the loser.

Adequate compensation can remove the obstacle to emergency necessities. It can never protect the livestock industry from the loss of material and impetus making possible better product.

I realize that this opens questions of serious difficulty, but it is for the purpose of providing the country with the machinery to meet serious difficulty in questions of such paramount importance that stockmen in the United States have become insistent that the broadest and deepest intelligence available be directed to this question. Thus far the evidence is indisputable that official agencies have not intelligently estimated this factor.

It is not thinkable that the intention of the administration is other than benevolent and essentially honest. Both of these qualities however, require sound foundation. Such a foundation can only be a product of deep and far reaching wisdom in the philosophy and practice of livestock culture.

The organization of the Board of Animal Industry should be a matter of deepest concern. The highest intelligence of the country should be available either in administration or in effective advisory relation.

To any extent that these conditions do not obtain they should be created. When they do obtain, public opinion, effective machinery, and coöperation of the masses will follow logically and inevitably. In that day the hundreds of thousands of stock owners, upon whose methods and efforts the prosperity of the country depends, can proceed, confidently and prosperously in the working out of their problems presenting so many intrinsic difficulties.

Date and occasion of writing unknown.

THE EFFECT OF THE WAR ON THE HOLSTEIN BUSINESS

ASSESSING the value of various factors entering into any market status at a time like the present is by no means a simple matter. Even though business depression distinctly present in the United States for more than a year has touched the farmer least, and the dairy farmer and breeder of dairy cattle less than any other, it is not possible to say that his actual impairment has not been considerable. Granting a participation in the general stagnation, the question as to the direct influence of the European War upon the business of breeders of registered Holstein cattle may be met with fair accuracy. In general the market for purebred cattle reflects conditions under which the industry at large is operating. Of late the dairy industry has been far more active and prosperous than the meat industry. In consequence the market for purebreds has had a strong impetus. In particular that breed will show the greatest activity which is mostly closely related to the commercial dairy industry. Inasmuch as the farmer is the producer of dairy products, the breed that is distinctly the farmers breed will respond most sensitively to the conditions pertaining to the general dairy farmer.

It is beyond dispute that the Holstein is at present the farmer's cow. Up to the time of the outbreak of the war, Holstein breeders more than any others shared the prosperity of the farmer clientele. To what extent and in which direction will the war conditions modify this aggressive market?

It can scarcely be doubted that food production will demand and receive unusual stimulation as a direct consequence of the war. Logically, the trend of production will be toward food that is:

1. Most generally used.
2. Most indispensable.
3. Cheapest.

In all of these respects milk is easily fixed. It is to be anticipated that with every increase of acuteness in demand for food, milk production will have the earliest and most pronounced stimulus.

The purebred industry is not a game. It is the production of pedigreed seed. As such it is vital to the economic desideratum.

Except upon the principle of higher yield per unit, the dairy industry can not stand. Upon breeding of high producers depends the fulfillment of its destiny. So far as it is possible to foresee, the demand for registered Holstein cattle of proven ability must be stronger than ever before.

The index of activity in registered cattle as affairs are now is the Public Sale. Most of the breeds during the acute disturbance immediately incident to the war, as shown by the Fall sales of 1914, felt a sharp impairment of market. Not so the Holsteins. There may be many reasons for this, but prominent among them is the closeness of the Holstein cow to the general farmer. He is prosperous; is under pressure to produce more; prefers the Holstein for his purposes. If there is doubt as to the necessity of increased activity in Holsteins, it is not apparent. Demand will outrun supply.

Delivered, Twenty-Sixth Annual Meeting Indiana State Dairy Association, Purdue University, LaFayette, Ind., January 13, 1916.
Printed, report of meeting.

THE VALUE OF PUREBRED CATTLE

I HARDLY know why I should have been chosen to talk to a body of practical dairymen upon this subject, because as a matter of fact I am not a very old hand in the purebred cattle business, although I have been in a way a breeder all my life.

Nevertheless, it is a matter which is so important, and so near to my own heart, that I am more than glad to be able to come before you and tell my experiences, if for nothing more than to stimulate your thought, and if possible your questions, and in general to mark that coöperative fellowship that exists in our ranks.

When one comes to weigh the question of purebred stock in general, it won't do just to confine his view to dairy cattle. There is much to be learned by observation of other stock. I won't go into detail very much, but I want to call your attention, however, particularly the attention of the older men who may have had experience for a good many years in the observation of live stock, to the conditions in the beef industry which exist to-day, and to compare them with conditions which existed forty, and thirty, and twenty years ago. I am not speaking about the market. I am referring to the general characteristics and class of cattle. The place where one sees the evidences of intelligent efforts to breed beef cattle most clearly is, of course, on the plains. If any of you have been across the plains in the early days, as doubtless many of you have, you remember the type of cattle that were to be seen. Even if you have not been across the plains, you remember the type of cattle you have seen in the stock markets and those brought on the farms as stockers and feeders in those days. You realize that the conditions

as they are to-day on the plains are just as though we were dealing with another class of animals as compared to that early day. In those days there were unshapely, meager, rough, long-horned, essentially scrub cattle, all over the western plains. To-day such a thing as a herd of scrubs on the western plains is almost unknown. You often see cattle that are not in good condition, but you do not see any that do not bear the stamp of some breeding.

Now, what brought this about? It was the intelligent thought of the big range men who were engaged in that enterprise. I say big men, because any business that runs up into thousands of head of cattle, no matter what kind, is a big business and requires big men at the head of it. Early the thought came to those men that they must have a better type of cattle and consequently the West was soon covered with purebred bulls.

What is the result? It has been many years since any man on the plains would think of running his herd without purebred bulls. The result of it is that you see on the plains cattle that are shapely, of good conformation, of uniform type, uniform in color, and in all respects animals showing the mark of intelligent breeding by reason of the fact that bulls of the right character have been used upon these herds.

Now what is the advantage of this? Is it worth all that is put into the business? Is it worth the expense to have them look better, to have them more uniform in shape and color? Those are the obvious facts. Of course that isn't the point at all. The point is that the animal which has been produced by this method of the purebred breeder is from the financial standpoint a more economical animal. In other words, he is an animal which transforms food into beef to a better advantage.

Now that is the whole thing. Looks will not help it. Taste will not help it. Is it a more economical product, economical in that sense of the relation of the feed, length of feeding, and the final beef? There isn't a question about

it. There would be to-day a number of run-down herds, but for the purebred sires that have kept up the level all the time.

Now, what about the dairy business? Has the dairy industry done more than that? Take this question and think about it. Has the dairy industry done as well? Go back, those of you who are old enough, to the old herds of cows, which were nondescript cows, a mixture of red cows, short-horns, and all those old-fashioned kinds of cows in the milk herds, and we see them now more or less. They were good cows to a large extent. There were many of those herds that were good herds of milking cows. As you look over the country, take it at large now, not the select places, not the experiment stations, not the few places where the dairy industry has been developed strong, but as you look at the matter at large in all the parts of this State and of every other State, has the type of dairy cattle improved to correspond with the improvement in the type of beef cattle?

I think you will answer in the negative. I think that you will say that the dairy cows in general have not shown the improvement that the beef animal has shown. And then the next question to answer is, "Why?"

Certainly we have just as much interest in the dairy cows, certainly it is as close a proposition to the farmer, certainly it is a more manageable proposition, because it works in smaller units and is closer at the hand of the owner. And yet, the dairy cow, generally speaking, has not kept pace with the beef cattle in development.

There is only one answer to that. There may be various causes for it, but there is just one answer, and that is, that there has not been the conception on the part of the dairy farmer as to what he wanted or what he ought to have, that there has been in the mind of the beef man.

In the second place, the dairy farmer running a small business on a small margin of profit, and really financially hard up all the time, has not had the spirit or the courage,

or the intelligence, whatever it may be, to put good pure-bred sires on his herd and keep them there. Now, that is the fact and that is the reason why there is the very distinct difference between dairy and beef improvement, between the dairy type as compared to the beef type. I don't believe we dairymen particularly like to face that fact. I don't think that we are particularly proud of these facts, but the facts remain.

What can be done about this situation? What is being done? The first question that comes to my mind is this: Is it worth while? Is it worth getting underneath this whole dairy question and struggling for its uplift in general? What do we mean when we talk about the dairy type or the dairy cow not having kept pace with the beef animal? What do we mean by that? We mean that it does not show the same improvement in form, in a measure, but after all that isn't the gist of it. With beef animals we are talking about their capacity to lay on flesh economically. With dairy animals we are talking about their capacity to make milk economically. Two very different questions, susceptible of exactly the same reasoning as to principles. The same reasoning that determines the improvement in conformation of a beef animal, of course, determines the improvement in the conformation of the dairy animal.

But is conformation an important question in the dairy type? Once in a while you will find a difference of opinion about that, but not very often. There isn't any question that there is a certain type of dairy animal that is better than other types. There isn't any question about there being a real dairy type, not merely as a matter of having a better form, but because there is a correspondence between form and function. There is a correspondence between a certain make-up of the animal and the physiological possibilities, whether it is laying on fat for the beef animal or whether it is making milk for the dairy animal.

The same principle that applies to the beef animals

applies to the dairy animals. But that isn't the whole of it. As a matter of course, we have, in our refinement of dairy cattle, thought of certain peculiarities of conformation upon which we have laid a good deal of stress. We talk a lot of certain peculiarities in the matter of form that are not very important. There isn't any question that the fashion runs in various ways as to conformation in dairy animals, but it hasn't very much dairy significance.

There are certain fundamentals with reference to the conformation of dairy animals which are of vital importance and which we must think of. You know them just as well as I do. But here is the first question. Do the same principles that underly the inheritance of conformation in beef stock underly the question of improvement through the transmission of the ability to produce milk? In other words, is the milk producing function transmissible, just the same as conformation has been shown to be transmissible?

Well, of course, experience shows that that is so. Experience has shown that the capacity to influence the milk tendency is a hereditary thing, not as truly and uniformly as transmissible a characteristic, in my mind, as conformation; nevertheless, it is a hereditary characteristic. But unless we are agreed that the milk function will transmit on as a hereditary process and can be improved and uplifted by the process of breeding, there is no use talking about it any further.

Now, what is it that we are talking about transmitting? We are talking about transmitting a larger milk capacity, are we not? Well, now, that isn't really all there is to it. If we transmit a larger milk capacity and transmit with it a larger feed capacity, and we find in the end that the feed required to produce this extra milk costs more than the milk is worth, we would be going backwards instead of forward. It is a two-fold project. Not only must we have bigger milk production, but it must be a bigger milk production relative to the feed consumption, or we have not gained

anything. There is where the purebred industry is related to the dairy industry. Leaving aside the question of conformation, which we all ought to have in mind, and keeping in mind the economy of the situation, we talk about the need for more milk, for more individual production per cow, but we are liable to forget that unless more milk is related to relatively less feed, we have not gained anything.

Now, as a matter of course, the big milker is the big eater. We all agree to that. But does the increased milk production just correspond to the increased feed consumption, or is the value of the increased milk production of the big eater greater than the increased cost of feed? How many of us know that in our own operations? How many of us are taking any cognizance of it? That is what the experiment stations are doing for us. The experiment stations are here for the purpose of establishing those general facts in agricultural development to which we, personally, can revert when we want to decide any question that goes back to a question of principle. These agricultural stations have proved that the highly developed dairy animal, costing from 50 to 100 per cent more for feed, will produce from 100 to 200 per cent more profit in milk. Therefore, here is the question and here is the answer. Therefore, the milk has been worth the feed and more. Thousands have answered the question in that way and have added profit to their business on account of the increase in milk production, with a relatively low increase in feed. Then dairying is an economical proposition.

Well, there we are started at the bottom of this question. There is something that can be accomplished by heredity through proper breeding, and this something is worthy of being accomplished.

Those are the facts. Where do we stand? Where do we stand with reference to purebred cattle? Why do we always come back to the question of purebred cattle?

What is there about purebred cattle different from other cattle? Every one of us knows that there are grade cows that are as good as any purebred cow you ever saw. Every one of us knows that to be a fact. Probably some one of you has a mixed herd, and has in his herd, or has had, a grade cow that was as good or better than any purebred cow. There is no doubt about that. Let us not forget these facts.

Wherein, therefore, is the purebred cow better than the grade animal for your general purposes? Necessarily the purebred is not better than the grade. It depends entirely upon the grades. I have seen grade herds that would average as a milking herd better than a purebred herd of the same size. So far, that isn't a complete answer. For a man who is running a milk business, who has a profitable milk business, I have no reason to suppose that a purebred herd is better than the grade herd. Should he, if he considers it advisable to keep a grade herd, keep a purebred bull, and if so, why? Can you answer?

We have got to go back and consider some very large factors in connection with livestock. If we will take the great mass of dairy animals and consider them as a mass, we can figure their average worth. We will take a group of these average animals. Then we will take a group of animals that have been culled out as being inferior, or below the certain mark. We will call this group the inferiors. This is quite a large group. Then we will take a group of animals that are above the average, that are superior to the average. Now this group of superiors is much smaller than this group of inferiors. The number of inferiors is very much larger, but that doesn't matter particularly. That isn't the question. The question is whether this group of inferiors will continue to grow larger in proportion to the other groups. And the answer to this question should decide whether you keep a purebred bull or not. When left to itself, will the additions from the general mass be

greater to the group of inferiors, or will the additions from the general mass be greater to the group of superiors? Left to itself, there will be a constant drift from the average toward the inferior and still there will be practically no addition to the superior. There is a large tendency to take out of the average and add to the "below the average," and also no tendency to take out of the average and add to the "above the average."

But this could not be true with all live stock. Why? Because under the conditions under which dairy cows are kept, the dairy business has to go on. There is no natural selection that tends to bring the superior animal up into prominence and to weed out the inferior animal. Under dairy conditions, the inferior animal lives, breeds, and keeps on breeding, and stamping her influence upon the whole industry, all the time producing inferiors, whereas there is no influence under natural conditions that would lead to superiors. Now that is the result. What have we done about that?

We have chosen to put intelligence into this matter and make operative an intelligent selection where there is no natural selection, and that is all the purebred business is. The purebred business is nothing on earth but the result of intelligent selection which is introduced because there is no natural selection.

Now we come back to the question as to whether or not we want to use a purebred bull on a grade herd. It is conceivable that you can get a grade bull, properly bred, that is just as good as a purebred. I wouldn't dispute that. But you have very little means of knowing that he is going to be as good as a purebred. If you could raise those bulls yourself, if you knew all the conditions under which they were bred, then you would know yourself whether you were safe in using a grade bull on your herd. But as a matter of fact, you don't go into your own herd for a bull. You go out into the world for a bull, and you can't find a grade bull

whose conditions of breeding and development would be as satisfactory, as a rule, as those in your own herd. Consequently, when you go to select a bull to put on your herd, you go to some source of information as to the character of the bull. That is all. The reason you go and look for a purebred bull is because you want to know something about him and what kind of a sire he is going to make. You want to look at a record that has been kept. That is why you look for a purebred bull. You are looking for information as to the quality of the animal, not because he is any better than the grade bull. Keep that fact in mind.

However, the general tendency of your herd is to deteriorate, just as I pointed out a minute ago. It is a little hard to tell why that is so, and it would take quite a lot of time to go into details about it. However, it does deteriorate. The general fact is that a cow's heifer will not be as good as she is, unless there is some special stimulus put into the situation to make her as good or better than her dam. It is a matter of utmost importance to you to know that the animal which you bring into your herd of dairy heifers has some qualities that enable you to believe that there will be a special stimulus come into your herd and into your good cow that will make a better heifer rather than a slightly inferior heifer. Experience shows it. Millions of men have had grade cows that were giving good results and have been disappointed because they have not understood that a great cow will not produce a great daughter, unless there is a great stimulus through the bull.

So it seems to me that the question becomes strictly a question of intelligent thought. I regret to say that we are not any of us putting into this matter the intelligent thought that we ought to put into it. There are so many questions about it. There are so many doubts in our minds. Then it is so hard to tell what is the best family, where the best values lie; it is so hard to tell these things and many more. Then again, money is not as free as water,

and it is hard to tell how much to pay for a bull, how good a bull you ought to have, or what represents a given quality of a bull. That is just as difficult for me to decide as it is for you. The question before us is one of intelligent thought to be sure, but it is also a question of great doubt, and you have no more doubt in your mind than I have in mine, when you have to buy a bull, or when I have to buy a bull for my herd. It is a serious, painstaking question and demands thought.

Is there a way to proceed in the matter that is safe and judicious? I often recall my old experience with purchases of bulls. The first bull calf I ever bought cost me \$1,000, and the next one cost me \$300, because his dam had not made a large record at that time. But when this cow came to herself, she became one of the greatest cows of the breed. I am not at all sorry that I purchased the second bull, which only cost me \$300. I can't say that he was better than the first, for that is a thing which is hard to determine. The market is peculiar. I am only calling your attention to the irregularities which will help you to see that we are dealing with a difficult proposition. Sometimes a person gets disgusted with the whole business, because there is so little certainty about it.

I have a bull calf in my herd, for instance, which I value at \$500. I sold his older brother for a much smaller price. Why? Because in the interval the dam of this young calf has made a larger record. For this reason he is worth five or six times as much as his brother was worth a year ago. Don't misunderstand me. I am not making fun of the dairy industry. I am calling your attention to the conditions which we can't grasp. So this brings us down to a difficult question.

We are agreed that we ought to improve our dairy cattle; we are all agreed that we ought to get as good a bull to put on our stock as we can get, and as good as we ought to have; but the question is, How good a bull ought we to have?

That is one of the hardest questions to answer that was ever asked me.

It is customary to say, "Get the best bull you can buy. Borrow money to do it." I never say that. I wouldn't say that to any man, unless I was convinced that it was the thing for him to have, because the mere matter that you have to borrow the money doesn't make that bull what you want. It is a very difficult question to know how good a bull one ought to have. Of course, that bears some relation to the character of your herd. If your herd is about as good as any purebred herd, and there are some grade herds like that, you can't get too good a bull. Any bull that is less than that grade is going to pull your herd down. You can't have a herd of good grade cows that are great big producers, good dairy animals, and make that herd what it ought to be with an inferior bull. The fact is that you will have great difficulty in finding a bull that is good enough to improve it, or even maintain it. You will have great difficulty to maintain a herd on that level, so that the question of how good a bull you ought to have will depend to a large extent on how good a foundation herd you have to work on.

Supposing the best bull there is, in the way of transmitting ability, could raise a very ordinary herd of cows, so that the next generation would be on a little higher level, and so on. That is, there would be a gradual progress toward better dairy animals. The proper thing for a dairyman to do is to buy bulls as he goes that are increasingly good rather than to reach at the top at the very outset and get the highest priced bull he can find, and the highest grade of a bull to put on to his cows before they have reached the level to profit by this high grade animal. Therefore, my answer to this question when you ask how good a bull a man ought to have is that he ought to be guided by reasonable expectations of his herd. If he has a herd that he doesn't expect much of he had better get a bull that is only reasonably above his herd rather than the topmost bull, irrespective of price.

I want to say something in regard to the purebred business from another point of view. All of us who own dairy cows have a tendency to want to own purebreds. We have cows that are as good as purebreds, but we aren't satisfied until we can get into the class or society of stock that we want. Now in this connection there are two factors which we want to consider. You become a breeder of pretty high class stock, and you want to be able to sell your bulls for better prices. Those are the two factors which lead a man into the purebred business. Of course, there is the additional factor that he hopes to build up a big herd of high producing dairy cows. But for the most part, the things that bring men into the purebred business are those two factors. There is a great deal of danger in becoming a breeder of purebred stock and I want to tell you why. One day I was talking to a banker. Two or three of my friends were with him at the time. In some way we got to talking about the cattle question at Lake Mills, Wisconsin, and some allusion was made to the purebreds. The banker said that the purebred business was the ruin of the stock breeders. We asked why he said that. He said it was the ruin of our men. Then he named Mr. So-and-So, and Mr. So-and-So, and Mr. So-and-So, all of them practically "broke." "They don't know it. They are not as sound as they were when they went into the purebred business. They have invested in purebreds and now they are acting as though they were millionaires. They must have their automobiles."

I want to say right here, that an automobile that is used to serve your purpose is a wonderful thing. So many men in the country want an automobile in which to run around the place. An automobile that is purchased to stimulate your fancies and that is used to stimulate your tendency to run around is not a good thing. There is no doubt about that. Those fellows are neglecting their farms. Because they had an automobile they thought that they

could run two farms just as well as one. Instead of working two farms, they are neglecting both of them. They are not working either of them the way they should be worked. That bunch of men, because they got swelled up, and because they neglected their farms and because they thought the whole thing was the purebred, gradually began to lose their credit, and justified the banker in saying that the purebred business was the ruin of those men.

If you do it, the same thing is liable to happen. There seems to be a kind of a vanity about it that makes some people swell up and it over-stimulates them. Some one has said that it beats a horse race all to pieces. There is no doubt about that. When you come to an official test, every milking is looked forward to. It is the most enthusiastic thing you ever encounter on a farm. When the test is getting up into a high class, there is a legitimate excitement about it.

And now, beside that feature of the purebred business, there is a tendency to magnify the herd at the expense of the farm. That is the second thing that I want to speak about. The man who does n't regard his herd of dairy cows, be they grade or purebred breeding cattle, as the hand-maiden of the farm, as the assistants, as the side issues of the farm, and which is only a means of building the farm up to its highest possibilities, ought to fail, and he probably will. For after all, it is the farm that counts and not the herd that is on it. It is the farm that makes the farmer and not the herd. In the long run, take the country through, there will be no great breeders except those that are great farmers, because the herd is subordinate to the farm and is used for the purpose of magnifying the farm.

That is the essence of the whole question. That is the question that is before the breeders, that is before the teachers, and that is before the young men. Are you going to regard this thing from the standpoint of your farm; are you going to regard yourself from the standpoint of a

farmer, and make all these other things subordinate to the farm; or, are you going to disown your farm and your business and your community and run everything for the sake of magnifying that which is really a side-issue of your business, your dairy stock, your dairy herd, or your dairy breeding business?

That is the question that we must face. It is so crucial that one's conception of the relation of his farm to his herd, or his herd to his farm, will determine whether he is going to be a success in his business. Let us not forget that one thing. This country is made up of individuals of whom you are members and representatives, and this country is hanging in the balance agriculturally. We think we are the greatest. We have overshot ourselves in the respect of immediate production and we are not keeping up the fertility of our land, and the result of this is that our relatively high agricultural supremacy is going down. And it is going to continue to go down, unless we get busy. That means that every man must regard his farm as primary, and if he has a herd of great cattle, he must regard this herd as secondary. If this herd is not secondary and is not made to serve the purpose of the building up of his farm and his agriculture, he is not only failing for himself, but also for his offspring. That is the way I look at it.

There is one other aspect of this purebred business that I want to warn you about, and that is with regard to the speculative point of view. A man goes out to look around for a sire for his herd and he says he wants such and such a sire. Now, one man will say that he wants a bull that is going to build up his herd and make it a great herd of dairy cows. That man is safe. The next man will say that he wants a bull, no matter how old or how young he is, that is so conspicuous and so well advertised that his offspring will sell for very high prices, and he is willing to pay out a large price for that bull, whether he is any good or not. That man is unsafe. The first man is a breeder. The second

man is a speculator. I hate to use that last word, but after all, that is all he is. Now, gentlemen, we all do that in a way. I am not saying that it hasn't been done by some of us. It is the nature of the business to do it. You can't help it if you try. The question is whether or not that is the predominant motive.

The future before the young breeder who has respect for his general agriculture, and is willing to protect it, and who wants to breed good animals and who will let the speculative part alone, the future for that man is the brightest future that I know of anywhere. That is my full belief on the subject.

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Printed, report of meeting.

THE DEVELOPMENT OF THE DAIRY INDUSTRY

IT is always a little difficult to explain why a practicing physician should be brought off on a long trip to talk on a technical subject that presumably is better understood by nine-tenths of his audience than by him. I am not going to go into an explanation of that subject, except to say that I have gotten into the habit of being called upon for a good many different functions; in fact I always think of myself in that connection in the same manner as a Chicago judge was regarded. One of our very learned men, Mr. Emory Story, a witty lawyer and a scholarly man, was asked his opinion of the judge. Mr. Story answered in a way at least, saying, "Yes, the judge is a man of broad and comprehensive ideals, who knows less about more things than any man that ever sat on the bench." I often feel that might hit me if I keep on covering territory in the various fields that I get into. But I have a little feeling that this occasion is different, I judge so at least, by my internal feelings.

This morning I was shocked and almost hurt to hear my friend Mr. Wilkenson, who is responsible for bringing me out here, say that the doctor had dairying as a side line.

Now, if dairying is my side line, I want it to be understood that day is about over; I won't have it alluded to as my side line, whatever it may be as to the disposition of my time or perhaps as to the production of my income, it certainly is not a side line as to the intensity of my interest. I come to you from another standpoint than that of a small dairyman. I have gotten involved lately in the organization end of the dairy business—I refer now to the comparatively new but ambitious organization known as the

National Dairy Council—an organization which has charged itself with the harmonizing, amalgamating, and rendering effective the various branches of the dairy industry. But I am not going to talk to you now about the Council; I simply call your attention to the fact that that is the avenue through which I come to you to-day; it is because of circumstances related to the Council, that I am here to-day. And it is because of the point of view that I have acquired in connection with that great attempt to do something by which the whole industry can be generalized and the Council made to do effective work for the dairy industry, that I feel myself at liberty to-day to presume to talk to you about a big broad view of the dairy industry. I do not wish to speak from the standpoint of any limited dairy point of view, but about the development of this enormous industry which I don't hesitate to say to you is the greatest and most important single industry in this country.

One can not look into the question of the future of dairying without undertaking, if possible, to analyze the thing down to its smallest terms, because when you view the industry from its final terms in its large development, in its higher branches of commercialism, you find the subject so complex, so inter-communicative, so inter-locked in all business ways, it is almost impossible to talk about the thing in any clearly analytical way. It is only as you reduce the industry down to its smallest terms that you can get any kind of grasp of the situation from which to start towards a conception of the dairy industry, and it is with reference to this analysis that I use the term "dairy unit."

By the dairy unit I do not mean the single dairy farm which is frequently alluded to as the basis of our calculations. I go beyond that and say—the unit of the dairy business is the cow. The sooner we get to the point of view that our calculations must start from the cow, must correlate to the cow, the surer we will be that we are on a sound ground of reasoning as to this dairy industry.

Well, what do I mean about the cow? It is an old story to you and I don't want to worry you with talk about the cow—that is, of course, a profitable cow—I don't want to go on and repeat to you all of the things that have become axiomatic with reference to the fact that there is a profitable and an unprofitable cow. I don't need to argue with you about the general proposition of carrying unprofitable cows. But after all, you and I know that that question of the unprofitable cow has not yet been impressed upon the people of this country at all. The fact that you know it and that I know it does not in any sense solve the problem. The question is, What are you and I doing with our knowledge, our information, and our convictions upon that subject? Are we carrying the propaganda on this subject of the profitable and unprofitable cow to the place where it has got to go to be worth anything finally as propaganda?

In other words, I am here to impress upon you as to what you shall do with what you know, rather than to try to bring you anything that you don't know, and that is the gist of this whole question of pushing our industry.

Now, bear in mind the mere question of whether the cow is producing enough milk to pay you for her feed is not the sole question from an economic standpoint, but it is an unavoidable question. There is no use considering the value of a dairy cow that is not producing more milk than enough to pay for her feed. You say there are other factors. There is the question from the standpoint of soil fertility, the question of manure, and there is the offspring, things that have to do with her profit. It goes without saying, that the dairy cow has got to make milk enough to pay far more than for the feed she uses. Do you not know—every practical feeder does know—that the profitable cow pays for feed liberally, and that the more profitable a cow you have, the more you will find she pays a profit on all the feed she can be given? That is the final test of profitableness—her

capacity of increasing returns upon the feed she eats.

Let us look at that a moment; we don't want to talk any nonsense here; we want to take the last view about this thing. What do your dairy papers tell you? What do your agricultural schools tell you? Of course lots of things, friends, but once in a while they will tell you this: If you can feed corn and alfalfa you have a balanced ration, and they imply that is all you have to do to run a dairy, yet you have only to turn over the page and you are advised to feed so and so much concentrates, according to the supply of milk. What they really mean finally to say is that good producing cattle will pay you a profit on the grain that you buy and feed them, to say nothing of that which you raise; so that this question becomes in the large the question of every man who has any surplus grain, more than is necessary for human consumption, who is interested in the quality of the dairy cow he possesses, because the only place where grain that is not necessary for human consumption can profitably go is to feed stock of some kind. The purpose to which we would put this feed naturally is the one upon which we are speaking, and which is of preponderating importance in this respect to us. This, of course, ramifies and ties us to another important matter, and that is the question of the fertility of the land—a thing that we have adopted as the A B C of agricultural schools. The conviction that the future of the soil of this country, as to fertility, is dependent upon animal manure, is well established in us. We have accepted it. And I come here to-day preaching upon that old ground that you know just as well as I do, because I know that however well you may be convinced of the fact, the country at large is not convinced of it. We have paid the price in a thousand different spots in this country for not having convictions on the subject. It has been known in New England, New York, North Carolina, Georgia, Louisiana, and Texas from time immemorial that without

proper fertilization of your land it will run down in productiveness, and in spite of all our knowledge the land has gone down in productiveness. You and I know that it is not a new story, but no matter how well we understand it ourselves, the country at large has not adopted it as a working formula.

Now the question is, whether a State like Nebraska, with its resources of grain, hay, and everything that you can take off the soil direct to market, should be so treated, or whether this great State is going to learn the lesson of soil fertility as other States have.

There is another great question, but it is a little more of a personal question, which applies to all men who are annually rearing purebred cattle: Do we understand fully that the only excuse for our being in the purebred cattle business is the grade cow?

Do we really understand that, until the product of our best efforts of money and brains is embodied in the product of our purebred cattle, and until that product is distributed upon the grade cows of this country, we have accomplished nothing? And up to that point, but stopping short of that point, we are playing nothing but an interesting game. Do we realize that the purebred business has no possible foundation except as to its value to the grade cattle business, or until the young bulls we raise are distributed among the grade herds of this country? Until then, we have accomplished nothing, and we might as well be out of the business. We must make the farmers realize this.

In my own State of Wisconsin there are not 25 per cent of the herds headed by purebred bulls. It is largely because the purebred men are not holding the real thought of their work before themselves. We are apt to be carried away by the high tests, beautiful shows, big records, big prices, as well as all excitement and interest that occurs in the purebred industry, and to forget that behind it all lies the

grade cow, and until we have contributed to uplifting the grade cow, we have accomplished nothing. Let us not forget that there is a philosophy in this purebred business which must be observed and elevated before it makes the whole thing transparent.

With these thoughts, these ideals before me, you can see why I talk about the dairy unit being a matter of importance. I can see the whole thing tied together. I see another thing before me: I can see better farm buildings; better conditions under which cows shall be housed; I find more sanitary ideas underlying the whole installation of the dairy farm; I see the question of greater cleanliness in the handling of the dairy products on the farm.

I am going to talk more about that later, because I am interested in the remarks of Mr. Hammond. I am looking forward to the time when the average dairy farmer will be a clean individual. Why not? There is no reason why not. It is not expensive; what you must have is a clean conception; it does n't mean a great expense, big equipment, and expensive installation. It means a clean conception.

And then I am looking forward to the time when there will be care outside of the production end; when there will be intelligent care all along the line; when there will be real recognition of the fact that our industry depends entirely upon cleanliness.

I may be looking for the millenium, but I expect the dairy situation to improve a little before the millenium, and I think the history of the industry in the last ten years justifies it.

When we stop to consider what the changes have been in the dairy industry in the past ten years and compare it with the previous season of 50 or 30 or even 20 years, you see the situation is not without hope. There are things that still can be done for improvement because things have been done without half trying. But there is one thing I

want to say to you, and it is this that leads me to come to these meetings, particularly where there are young men, young farmers, the thing that is going to determine this subject as to the future of dairying is going to be twofold.

It is going to be in the first place a deep respect on the part of the dairyman for his calling. There is n't a whole lot of romance running through the daily life of the dairy farmer when you come to consider what he has to do and how he has to do it, particularly if he is short of money and has other adverse conditions to struggle with. But let me say to you, as a great foundation principle of the psychology of the human race, that just the minute you inject into a subject a factor of real interest, intellectual interest, just at that minute you begin to dignify and uplift that subject. Of the things that are recommended with reference to the dairy cow, one of the most important is weighing your milk. If you have never weighed it before you will find it puts the element of interest into dairying that the average dairyman never saw in it, and when you go beyond that and assay the milk as to the butter fat it contains, you put into your proposition an interest that never was in it before.

When you begin to breed intelligently so that you take your cows of a given breed and estimate them in the light of their progeny, you inject another most interesting element that never was in it before. And by the time you carry the larger ideas of your business on and on and on, through the intellectual factor, you will find when you get to the top you have the most intellectual agricultural problem that was ever brought before the human mind, and I undertake to say, one of the most appalling intellectual problems that ever occupied the human mind in any direction. I am not exaggerating at all when I say that I believe the dairy farm offers a larger field and makes a deeper impression on the mind than any one avocation I have known anything about, and I fully believe it.

Now, gentlemen, that being the case, do you see that the way to bring up the respect for the business is to bring into it intellectual factors, and that means only to do it right. I don't care whether you are in a grade business or a purebred business, the thing only needs to be done properly to become an entrancing business in a larger way.

The other factor in carrying on a dairy business successfully is, faith in the future, faith in the industry. You take an old dairy State like Wisconsin that is instilled with the spirit of dairying and they never have their faith particularly shaken; they sometimes growl about it but they go right on dairying because it has made Wisconsin what it is; but you take a new State like Nebraska, which has been one of our prosperous commonwealths, one of the biggest grain sellers and money getters in the world, and is moving along towards a great commonwealth, but which is not particularly a dairy State, and you will find that the farmer is disposed to scrutinize the dairy proposition carefully when he considers changing his mode of living, as he must do when he starts a dairy proposition. It is a close proposition without any great sales or profits, and it takes him a long time to make up his mind to be a dairy farmer. When he does, what are the reasons that lead him to take up dairying? There are two, at least.

First, he observes, if he is going to live on the land profitably he must have fertile land; he must not rob his soil any more, and for that reason the dairy business is the answer.

Or he may say, as Mr. Marsh was pointing out to me in a conversation we had,—that dairying is a resource and a salvation from adversity. When you get in hard lines, or in deep water financially; when returns are low and everything is dragging a little instead of on the highway of success; that is when a man turns to dairying, because it is a definite and certain means of getting ahead, not by leaps and bounds, but by careful and systematic upbuilding. Those two things are what bring men into the dairy

business in a new country. And the next to those important things is faith in the business, and that really is the great big predominant thing; they must feel absolutely certain that the business will go on; if they were students of history they would read that every great country developed through agriculture and dairying. They may say, Yes, dairying is sure to go on; but it isn't right before them and so they don't see it. Therefore, the time has come when the dairyman in every branch of the industry must see that he is closely tied to the whole progress of dairying; and that the great middlemen, great centralizer people, the great milk producers, milk distributors in the city, and manufacturers of milk powders, cheese, and what-not, have become factors upon which the dairy business is going to be dependent. They are dependent on the dairy business and the dairy business is dependent upon them. And what does it mean?

We have just been studying this phase of the subject in the Dairy Council. It means that not the dairyman alone, no matter what his grade, his quality, or what the care of his milk is, is dependent upon certain other important factors to maintain the advantage he gets out of them. In other words, the transportation companies, handlers, manufacturers, and cattle breeders have all got to recognize their responsibilities in making this whole scheme of dairying successful. There is no such thing as a separate interest in this business. We must all work together in building the industry in every possible manner, and that brings us to another important thought:

What is the future market for dairy products?

Now, gentlemen, this is a great big question, and it is before us. Is the consumption of dairy products what it ought to be to-day? You know perfectly well it is not. You know perfectly well there is no rule in regard to the consumption of dairy products to-day; there ought to be. What is going to make the market bigger? We maintain

that the business interests that stand between the cow and the public have got in some way or other to increase the market for the dairy cow's product,—a market that will give the man who milks the cow, confidence in the future. We maintain that the market is the especial business of the manufacturer and distributor, and until he busies himself with making a market for the dairy products, there is no security in the dairy business, and that I don't hesitate to say. There is no security in the dairy business until the markets are on a better stabilized basis.

Why should we feel justified in trying to stimulate the market for milk and its products?

In the first place, from the standpoint of the human race it is the best food there is, in many respects, and also because, from the standpoint of special nutritive values, it alone fills the bill for human consumption.

The second reason is that at present, even under the present adverse conditions, it is the cheapest food of its character that is known.

Now, for these two reasons, strictly in the interests of the public, and not in the interests of the cow men, or dairy-men, or butter-men, or middlemen, that market ought to be stimulated. Will our people see the need of taking up this work? I think they will, for this reason—I have hinted at it before—the future of agriculture in the United States is absolutely tied up to animal husbandry. I won't just say dairy cows, but I do say that the great agricultural supremacy that the United States holds to-day can only be maintained by a broad and comprehensive policy of animal husbandry. The dairy farmer is not responsible for the country—none of us are—but it becomes a great question of national policy; and here is what I would call your attention to particularly to-day: Is the national policy of this country thoroughly and intelligently directed towards the improvement of animal husbandry?

I will answer, yes, in certain directions, it is. So far

as its agricultural department is concerned, it is intensely directed towards the uplift and welfare of animal husbandry. But so far as its legislation is concerned; so far as its creation of public opinion is concerned—I can't say it is hostile—it is very indifferent. I don't believe that the administrative or legislative functions of this country are in any large way keenly aware of the fact that animal husbandry underlies our national prosperity. I don't believe they see it, but so clear is it to those who think about it that it seems almost beyond argument; and yet, while I did not come here to talk politics, I would say that perhaps I am a free-trader, at any rate I have been a comparatively low tariff advocate. But this question of the relation of dairy products to the tariff must be seen to intelligently; it is far-reaching. It is all right to say a commodity must be produced where it can be produced the cheapest, that is the economic law of the world; I will accept that for the time being, if you like; but I want to say that this question of dairy products is absolutely a different question from the question of any other known commodity. Even our agricultural products, such as grain, cotton, and tobacco are protected, and they all have a certain commercial value with reference to this question; but when it comes to the question of dairy products, the question becomes an entirely separate question, because the dairy farmer needs to be protected, because the country needs what he can produce, and our soil demands that what we consume be produced on our own lands. I will not undertake to say what the tariff should be, but I will say it ought not to be regarded on the basis of mere commercial competition with some other country, but from the standpoint of national necessity, and whatever is necessary to make the raising of live stock, particularly dairy cattle, attractive and profitable to the poor man who is starting out in life, is the thing which in the long run must be considered to contribute to national prosperity. It is no political question at all. It

is a question of conservation, and the question of the salvation of this country. I don't want to be misunderstood in this at all; I have n't the slightest political aspirations, but I want to call your attention to the fact that this question of the tariff on dairy products is in a sense by itself and absolutely must be so considered. Another thing on this same line of thought is this: Public opinion is very necessary behind all of this, and still it is not doing anything about it, because it does n't care, it is too far away; all public opinion cares about is the price of butter and milk. So great is that fact, that whenever we come at the public with any of our great economic issues in which we are concerned, we are made to stand before the public simply on the basis of commercial rivals trying to save our trade, and the proper development of public opinion can be made through our increased market work.

As we now stand, the dairy business is the subject of two very serious problems. One is the competition with a legitimate food product—margarine, or "oleo," as they call it now; that is, competition with it on a basis of misrepresentation. The other is the question of health.

The dairy business and the dairy world have no right to object to straight business competition with margarine. There is no ground upon which to have any difference with margarine except one, and that you know perfectly well—that the effort in all margarine business is to sell it for butter, and you know, as long as it is so sold it is a war to the knife and should be so with every dairyman. As long as there is any way to distinguish margarine from butter, the ultimate consumer must at all times know what he is getting, and that will solve this problem. Who is the ultimate consumer? Why, the purchaser, the manufacturer will tell you. That is the argument from Washington, from Chicago, and elsewhere, but that is n't true. The ultimate consumer is the individual who gets a piece of butter put on his plate wherever he happens to be, and the question

then becomes: Is there any way for that individual to tell whether he is eating butter or margarine? Until there is a way, this fight has got to go on, because there is where the substitution occurs. It is n't in the kitchen, grocery store, or factory; it occurs when it is put on the plate. It sounds like bigotry to say that margarine must not be colored. The margarine people—and I had a long conference the other day with them, a long and pleasant, but an absolutely divergent conference—the margarine people say their product must be colored, they can't sell it otherwise. We say it can't be colored because if it is it is sold for butter, and that is the only situation to-day, the only thing worth talking about. Nevertheless, the public has not been educated to look at it from the standpoint of national salvation at all; it looks at it from the mere standpoint of competition between butter and margarine, between the dairyman and the packer, when it is a question that is undermining the dairy industry by making it meet unfair competition in the market, and when our industry is undermined, national prosperity is jeopardized. Now, the question is as big as that, gentlemen. Legislation and public opinion have n't touched the essence of that question, and it remains for you in every possible way that your influence can be exerted, to see that public opinion is enlightened on the subject. It is not merely competition; it is the question of the unfair burden put upon the dairy industry by misrepresentation; and that is the whole thing.

Then there is one other thing that I want to talk to you about, very seriously indeed—it was suggested to you this morning by Mr. Hammond,—I want to say that the burden and the great struggle before the dairy industry to-day is the health question. This is one question that I feel abundantly competent to discuss. I have taken a great interest in the health department of many States myself. I am not going to discuss it very much except to say this: That the agitation with reference to milk and

milk products from the health standpoint of health officers and by agitators of one kind and another, and women's clubs, and mothers rearing infants, and all that, has been marshalled into a great big influence which on the whole has tended to check and restrain the dairy industry. Now, gentlemen, Mr. Hammond indicated that to me this morning, and the logic of what he said is true. He said the public is going to demand clean milk at a safe price, and he cited tuberculosis and typhoid, and discussed one phase and another, and he is right about it, that is, where the public is trained the public is moving towards a closer scrutiny as to quality of milk with reference to its safety. Their interest in it as to chemical quality and exact food value is a minor matter. What the public is concerned about is its safety. Now, it goes without saying, that in a great big issue—where a very large percentage of the agitators, with absolutely good motive, don't know one thing about the subject except the little bit of tiny knowledge they have on the subject of its bacteria—the agitation is naturally going to be in the nature of a crusade against the industry, to a large extent. Now, as deeply as I realize the importance of the health aspect of this milk question—feeling as deeply as I do that ultimately it has got to be solved on a basis that is sound and in the interest of the public—I still say that it is of the utmost importance that the issues incident to the milk industry shall not be imposed upon from without. The ordinary health officer's regulation tends to be oppressive because it is not intelligent. The average attack made upon the milk situation is, as a rule, exaggerated, because it is, as a rule, not comprehensive; yet that is the kind of regulation there will be unless the regulation comes from within, and that is the thing I want to say to you on that subject. The thing for us to do inside of the dairy industry is to take hold of this question of safety and of quality from within our own ranks, and see to it that it is not necessary to have rules imposed upon us that are

impossible to carry out and, if carried out off-hand by legislative enactments, as Mr. Hammond suggested to-day, would put the dairy industry out of business. I don't say that Mr. Hammond means that but after all if they go on enacting on the whole subject the way it is thought it might be done it would absolutely terminate the whole dairy business. The thing to do is to go at it from within, and place our industry above the assaults of those who know nothing of its fundamentals.

Now, with all of this lot of things I have said, what is the remedy? The remedy is—organization in the milk business more than any other business in the world. It does n't mean moving against a common enemy. If there is any one thing organization tends toward, it is self-improvement; that is what I look to it for.

In the second place, we have got to do something with our markets, in order to get the people of this country to realize that they should be using from four to ten times as much milk products as they do, in order to fully satisfy their physiological needs and economic needs,—from four to ten times as much should be used as is used to-day in order to fully justify the situation.

And to accomplish this, I want to say to you this whole question becomes a matter of education; it is a matter of presenting right information on the part of every man that does know about our industry.

You know what the agricultural colleges have done, and yet there comes a point beyond which they can not go; there is an abyss that they don't cross. But now we have the county agent; he attempts to cross the abyss; he attempts to teach of agricultural products; and he goes right out and shows the farmer what to do, and he is the man who is turning the trick. You have no idea of the difference that this is making, and the responsiveness of the average farmer who wants to know what to do. I was talking to a gentleman this morning, and he asked, "How

would you go about getting one of these agents? They tell us at the schools, 'if you will send your milk in to us we will assay it and tell you how much butter fat is in it'; the truth is, we don't want to know, and yet we don't know how to handle our dairy." I said to him, "Are you and your neighbors standing behind your community? Then get a county agent that actually takes the farmer by the hand, and says, 'come on; this is the way.'"

The middleman is the man between the actual producer and the market, and that means the butter people, cheese people, purebred stock people, and feed people,—everybody who is involved in this industry in any way should take hold of the subject, and each and every one of the things we have talked about should be directed through some organization which is putting forth its efforts to help the several interests. It is the only solution. I have come here to-day because I am imbued with the importance of the whole situation, because there are involved as great questions as ever will come before the people of this country, just what we are talking about to-day, and I hope my intensity will lead you to feel there is something to be intense about.

III. MISCELLANEOUS

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Delivered to the Graduating Class of St. Luke's Hospital Training

School for Nurses, June 22, 1904.

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A WAY OF LIFE

FEW students stepping out of school pass into their professional work with so easy a transition as do the nurses who are graduated from the modern schools.

For years your work has been real work, differing not at all in subject from that which you will do as graduates, and in method differing only in minor detail. You have done many kinds of work; borne grave degrees of responsibility; dealt with all manner of perplexities. It is quite possible your experience has been more varied than all your subsequent work will yield. The grade of work you have had to furnish during training is in general the highest of which you are capable. You go out trained and, presumably, well equipped. For work? Yes, thoroughly equipped, perhaps. To live? That is not so clear.

If one has only in mind sound health, good habits, and reasonably intelligent principles, one would feel very safe in saying that your path is clear. But if one look more closely into the problem of life and regard the deep perplexities of your relation to the world, one can not have more confidence than is due to the recognition of the value of good ideals and the beneficence of work. Your problem is as great as another's.

It is probably not wise to start out with the conviction that life is a problem with the terms of which one must struggle constantly and intensely. One ought to have some trust in the true direction of human affairs, and repose in a great measure in the belief that good work and good intentions yield good results and make a creditable life. But of these, work is the feature of safety. Good intentions may be coupled with the most hopeless wreck. Perhaps

the explanation of this unhappy fact lies in our misconception of intentions.

Do we credit a careless or mischievous child with much of any intentions, good or bad? Ought we not to have in mind a certain rational quality when we look upon good intentions? Do we realize that it is not at all the same thing simply to have no bad intentions and to have really good intent? The fact is, that we have in mind the negative quality, this absence of vicious desire, when we speak so distrustingly of good intentions. Real intentions involve thought and vision and maturity.

"When I was a child, I spoke as a child, understood as a child, thought as a child." So far, perhaps, not bad, but by no means for that reason of necessity good. Good living is a positive process, and not a passive drifting, even in placid waters. With your growth into maturity comes obligation to think and see. It is not easy to think independently when one is of the mass and engaged in the confusion of world affairs. Still harder is it to see distinctly the form and quality of single acts or elements of human experience when overlapped by and interwoven with all related things.

Multiplicity of items and complexity of structure make the detail of life very obscure, and this lack of definition and the consequent vagueness of our conception increases with that multiplied function that we call civilization. This is true of all affairs of society and especially true of ethical questions. Right and wrong, instead of being simple and plain in the network of life, become covered up by the overlapping of interests, entangled with the ideas of rights and privileges that exist as a matter of custom. What was a simple question in primitive society becomes a knotty problem in modern days; and the very basis of decision originally conclusive may be repudiated by a developed ethical code. Not only are things confused, but we must recognize that there is nothing unchangeably fixed, even in matters of

right and wrong. As we grow in experience and moral insight, we inevitably modify our conceptions of morality.

And yet, the matter is not hopeless and there no doubt is a way to live, reasonably clear in mind and heart. Obviously it will not do to revert to some conception of primitive society and try to live on that hypothesis. The fruits of human experience are the property of the race, and the use of its lessons the obligations of the race. Whatever we do and wherever we live, we can not ignore them. We find ourselves, then, confronted by this perplexity, the necessity to think and act intelligently in accordance with our light, in conditions that seem to hamper individual action and cloud one's vision.

Inevitably the question comes to every intelligent mind, Why do I live so? What is it that makes me a factor in this more or less badly directed even if not purposeless stream of humanity? And even while answering that query more or less satisfactorily, the further query comes, need I be and continue so unsatisfactorily related?

These are not the problems of youth, nor likely to be very troublous in the burst of early enthusiasms. Sooner or later, however, they will arise, and to me it seems that sooner is better than later, if there exist a solution of the difficulty.

Obviously it is not for any of us to "grasp this sorry scheme of things entire" and "remold it nearer to the heart's desire." The world goes on in its ruthless development, and if there is anything to be accomplished by taking thought, it is for the individual in his voluntary adjustment to his environment. That the reflex of the individual upon the mass is of infinitesimal power is usually true; but that the attitude of the individual toward life is potent in shaping his own destiny, or at least in determining his own peace of mind, one can not question.

The primary difficulty in approaching this matter is with the individual. No progress is to be made except as

the expression of the aggregate weight of individual aim and effort. Even while realizing the something maladjusted in life, the mass of people fail to recognize what is awry, and of the few who have the insight to discern the difficulty, still but a fragmentary few have the confidence and poise to grapple with it. Yet, it seems to me not obscure nor hopelessly difficult, though one must admit that just how to do is not always clear.

One can not withdraw from the rest of the world and, standing in contemplation of the scene, rejoice in the fact that he is fortunately independent. One must go on in the stream, fulfilling his obligations as they appear. The question then becomes, Can one be closely surrounded without being entangled in the network of affairs? Is one an integral part of the plan, a thread in the weave, or is the contact voluntary and intelligent, more or less to be determined by choice? If we are bees, clearly we are the former. If we are evolving another type of living, we may be the latter. But, if the latter, if we are to have an independence of being, how is it to be accomplished? Clearly there are limitations upon this possibility. But, is an approach to it desirable? Is the effort feasible? Assuming, as I do assume, that a personal freedom of some sort is the ideal, the various considerations involved in this struggle become of paramount importance. I say struggle advisedly, for no matter how gentle and quietly the end may be achieved, the process is incessantly more or less strenuous.

As we regard life to-day, we owe an obligation to our fellows. We have duties and responsibilities to society. To live in the world and shirk these is not, under our best conceptions, moral. So far as these exist we are not, can not be independent. They constitute, it is true, much of the burden of life and the more imperative as we grow in ethical perceptions. As citizens or fathers or mothers or nurses, we find before us always duties unavoidable and more or less acceptable according to our strength. It is preposterous

to suggest that we can ignore them and thus achieve independence. In fact, we are prone to regard our duties as the inexorable law that enslaves us; to become the helpless drones in our various tasks.

We look about us as the years go on and realize that every day adds to our points of contact with the world, and that in consequence we establish daily new relations that bind us more or less.

You will agree that the labor of living increases constantly as the resources of the world increase, and the means of comfort and indulgence multiply; as the community develops from the primitive and provincial into the cosmopolitan; as the knowledge of material possessions and so-called civilized ways permeates the people and penetrates into the more isolated parts. As the reciprocal functions of individuals and classes develop, life becomes more difficult, more strained, more selfish. Labor-saving devices beget new labors. Facilities for comfort induce struggle to acquire them. We see ourselves of the machine and bound to our part.

From this point of view the problem becomes more difficult the longer we live. But are we right about this? Is it our duty to society that enslaves us. Is it dependence of society upon our contributions, no matter how valuable or important, that is such an irresistible pressure? Is it not rather some dependence that we feel upon society that makes us into more or less automatic toilers? Toilers often overworked and too often without joy in our work? Do we feel as a rule that individual independence that makes for peace of mind and unhampered work? Few there are who have not in mind some later day when by hook or crook life will be more simple and relieved of its perplexities. Yet beyond doubt it rarely becomes less complex, and in fact it is only by adopting some plan for daily use that much improvement can be wrought.

If we analyze our habits of body and mind we are

impressed by the fact that we are all run into one mold. We eat and sleep and work and play and talk and think in ways so similar one to another as to make a general uniformity. Of course from one point of view this represents the working out of a best way through experience, but from another point of view it is essentially imitative. We do all this not because we realize that it is the best way, but because other people do so. And here lies the gist of the whole matter.

Without discrimination as to our individual needs we assume that we must do the conventional thing, rapidly create habits accordingly, and finally establish as necessities, all manner of things which bear upon our physical and mental life, which are in fact nothing more than accustomed factors and bear no relation to our real needs.

So far as they become habits they dominate us largely, but after all, the real tyranny is in the adherence to that customary method that we call fashion.

The need for food at certain times is habit. The type of food that we demand for our satisfaction is determined by fashion. So with clothes, so with mental food, so with life in general. We have certain elemental needs; upon these needs we have erected a huge and complicated structure of wants, and these wants representing for the most part not our spontaneous want, but our imitation of the ways of others that have again in them no relation to real needs.

Not only is this true in physical and material things. It gives color to our mental operations, to our conception of culture and education, and it dominates, to a crippling degree, our moral standards and judgments. Not only must we know certain things, read so and so, have such and such accomplishments, but we must take the customary attitude toward moral questions, with no weighing of them upon their merits for ourselves, but because society has gotten into that rut, and so far as social edict is our law, has so decreed.

All of this I merely sketch and suggest for the purpose of directing your attention to the dependence that we permit ourselves to establish upon others, and to contrast it with freedom of individual action and judgment. The result of this is, that in material ways we become enslaved by *things*. In intellectual ways we become fettered by *opinion*.

In either event we find ourselves under a pressure that is a burden. We struggle madly to provide ourselves with things. We live distortedly to ensure for ourselves harmonious opinion. But again I repeat: It is not what we do for society that makes our burdens. It is the demands that we allow ourselves to make upon society; the wants we permit to grow upon us that keep us chained.

And now I am prepared to offer an answer to the query I propounded in the beginning, "Need I be and continue so unsatisfactorily related?" To me it seems beyond all question that one need not. I am not of a mind to advise a radical and obtrusive revolt against the conventions of life. Few are strong enough to attempt it. None perhaps are wise enough to justify it.

I plead only for a quiet withdrawing, so far as one's inner and personal life is concerned, within the circle of one's individuality. I believe it is wise to realize that one's needs are few; to make one's wants simple; to regard possessions as a burden, not a boon; to feel that the sacrifice of peace and self-respect to fashion is ignoble; to find repose and reward in work well done; and above all to recognize that, inasmuch as the only place of judgment of final value is one's inner consciousness, to cast one's life according to outside influence is to come to inevitable discord with one's deeper nature.

And now, young ladies of the graduating class, in presenting to you this simple idea, I am aware that it has no application to you more than to other people of your age and experience. I think perhaps I say it to you with the more earnestness because of a realizing sense which I have, that you have started out on a career of promise both as to

personal happiness and general usefulness. I have, hence, a deep, underlying feeling that anything which could contribute to the rounding out of personal character, even by so slight a suggestion as this, I am anxious to contribute. I suspect also that I have a slight feeling of anxiety because of special temptations which I know you are destined to encounter.

Your work carries you away from the simplicity of hospital life and routine into all manner of external worldly conditions. By no means always, but frequently enough, your path lies in association with the extreme luxuries of life. Familiarity and custom breed habit, and habits are insidious and tenacious. The only safeguard against dropping into the things which do not become you and which you can neither afford nor profit by, is eternal vigilance. I urge you to maintain for yourself a rigid discipline and circumspection as to personal habits, discriminating intelligently between needs and wants, to the end that you become not only personally self-possessed, but, toward the public, quiet and impressive examples of wise living.

And now in parting from you, the pleasure of bidding you Godspeed is qualified by the pain of having you leave our family walk.

The comfort in this lies in the fact that, although you do go hence, most of you, we hope, will periodically renew your associations with us in various circumstances, and that we shall move on in paths of common usefulness and mutual support.

From a Personal Letter, Written March 28, 1905.

SMOKING

IT naturally occurs to a boy as a question, Why do our elders who have habits decry them to their youngers as pernicious? Therein is the epitome of all human frailty. Every man sees himself the victim of more or less dominating habits which he would give the world to be rid of and which he can be rid of only by great struggle. The difference between getting rid of a habit and never having had it is world wide. Of course, this applies not only to tobacco, it applies to all extravagant and deteriorating habits.

If one could only realize in youth the great power of habit, and this applies just as much to good habits as to bad ones, he would invoke his intelligence on this subject much more deeply.

The man who grows old wisely puts in a large part of his time in undoing the habits of his youth or building up habits which he should have built up in his youth.

So far as this tobacco question is concerned, I am unequivocal in the following opinion:

The individuals who are distinctly benefited physically, morally, or mentally are so few as to be practically none. The individuals who are seriously damaged physically, morally, and mentally thereby are myriads. Between these two extremes, is the great army of tobacco users, none of whom are benefited and all of whom are verging more or less closely upon injury.

The basis of the habit is essentially social. The superstructure is a craving of the nervous system for a narcotic. A boy begins to smoke for imitative reasons. He lets the habit grow upon him for social reasons. He becomes dominated by it for narcotic reasons. Tobacco is a strong

narcotic, very damaging to the nervous system, more or less according to the individual and according to the intensity of the practice.

There is no doubt that tobacco has a strong influence in the deteriorations involved in the heart, kidneys, and brain. That it does not more often obviously produce disaster is probably due to the fact that it is abandoned before the crash comes. That comparatively few people are badly hurt by it, is a common observation. *This is not true.* There are few people who are not more or less hurt by it and the reason it is not more apparent is because the effect is so indirect and insidious.

I do not hesitate to say that I would strongly urge any boy never to begin the use of tobacco. To postpone it to the age of twenty-one, or thirty-one, or forty-one does not help it materially. I would just as soon say, do not begin to use opium until you are of mature years. Not that tobacco is as harmful as opium, but the question of beginning at some late date is about the same in principle.

There are very intelligent medical men who will not accept this extreme opinion. I am, however, quite convinced of its truth.

The fact that one does not urge every man to entirely forswear tobacco is quite like other facts of a non-meddlesome nature. However, as a rule they are better off without tobacco.

If they do not choose to stop it, that is clearly their affair. A boy, however, is entitled to perfectly definite and candid advice. I, therefore, without hesitation ask you to pass this on.

Delivered to the High School Pupils of the Francis W. Parker School,
March 22, 1907.*

THE PROFESSION OF MEDICINE AS A VOCATION

UNDER the illumination of this school to-day, I am conscious of having a distinct feeling of something missed when I was of school age. I do not think I ever felt it so clearly before.

I am an old teacher, accustomed to lecturing to men and women from platforms without embarrassment—I should be ashamed, in this school, to use the term embarrassment, as the term does not fit the situation,—but still I am a little at sea as to what to say on this subject to-day, because of the fact that, technically, I am talking about something that you do not know much about, although generally I am talking about things which you know as much about as I do. So it is difficult to know what to say without getting into territory that is useless to you.

The thought of a vocation, as to what one is going to do in life, does not strike in at a very early age. But although you may not weigh the matter very seriously, yet everybody, from the time of small childhood, has ideas and aspirations in various directions based upon taste—sometimes very unaccountable taste.

I remember clearly my determination about a vocation up to quite an age—and I still retain the taste that determined me that I was going to be a blacksmith. The reason was because I wanted to shoe horses. After that I was determined that it was in my power to emulate a colored friend and achieve a brilliant career as a coachman. Now, to a large extent, I have never lost either of those tastes. If I had to go into any manual trade it would be blacksmithing; and the one manual work that I could do would be

*The stenographic report of this paper was imperfect, and I have done the small amount of editing necessary to make it readable.—J. F.

taking care of horses and all that pertains to them. That is something that was undoubtedly born in me. I am very certain that the taste for being a physician was not born in me. I remember first being mixed up with those interests when going with my father among wounded men, but it was not anything that I was interested in or cared about.

And so it is. As we go along in life we come up to a point of decision beyond youthful fancies, and early notions. Of course there are exceptions, as, for example, many boys grow up with a clear idea of being mechanics. But, after all, it is not the rule, it is the exception when any boy or girl grows up with any clear idea of what he or she is going to do.

It can not always be a matter of taste or fancy. Various conditions come in to be determining. The questions must be asked: What can I afford to do? What education can I afford to have? What are the circumstances? What are the traditions of my family? Is it my duty to follow business? What is the tradition of my family as to the professions? Can I afford to put in the time necessary to acquire a professional education? All these questions come in, so that it is not always a matter of free choice.

But suppose we had free choice so that we could choose what we would, what would we do, and how make the choice? Well, a certain proportion of people would inevitably choose to be professional people and they would scatter themselves variously, according to their bringing up, among lawyers, or physicians, or ministers.

In the beginning, almost any boy or girl chooses a profession without any clear conception of what that profession is, what it involves, or what he wants himself. He may choose it because he thinks it is, as one might say, respectable. But, with all of that lack of distinct knowledge of what he intends to do, as a rule, a young boy or girl has ideals—ideals which are very well marked, high ideals, romantic ideals sometimes, miscalculating ideals sometimes

—and there is no other age at which so many people are prompted to hitch their wagons to stars.

Now I do not mean to say that I think people's ideals fall off as they grow older, they simply alter very much. Beyond question, many people do lose their ideals in practical life as they come into the disappointments and anomalies of life, and, as they come to know what the affairs of the world involve. But, of course, that is all very wrong. Just because you are disappointed; just because a thing is not what you thought and does not appear as you thought it was going to appear; because the majority of people you come in contact with are not what you think they ought to be or conceived that they would be; all this is no reason why your ideals should be lost.

As a matter of fact, the evolution should be a creation of ideals rather than a loss, and those who have effect in the world know that the progress of ideals should be into a more and more, rather than into a less, exacting sphere, and should be toward putting into other lives hopes and aspirations and ideals which are dominant and strong and manly.

As you go on into life and affairs open up before you, the aspirations remain, more or less, but they may seem to wane because they go through changes. What happens to you becomes of not so much consequence, and your hopes become less because it becomes perfectly clear, as time goes on, that they are going to be disappointed. There are quantities of things that you thought would be so and so which are not so and so. This is a disappointing fact providing you have permitted yourself to become too self-centered and intent upon the form of things.

Aspirations and hopes may fail, but they should be replaced, and under strong and satisfactory conditions they are replaced, by convictions—by their gradual transformation into firmly rooted beliefs as to what is so and so, what is worth while, what is to do. What can be done involves not only a belief in your ideals but also a dominant impulse

within you that would lead you to follow that belief to the end, no matter what it might be. That is a conviction. A conviction is different from a belief. A conviction ought to be the fruit of hope and aspiration; and, as a matter of fact, this is so.

Gradually, as you go through the experiences of life and find that it is not what you thought, that it is bitter, that it is disappointing, little by little you replace the thing that you wanted by the thing that you have proved, and you find that it is just as good and on the whole better.

When it comes to the selection of the practice of medicine as a vocation it does not become as a certainty a matter of a clear ideal. I suppose that every individual who chooses to be a physician chooses that calling for some different reason. I am not clear as to what actuated me. Whatever actuated me, I have received many a jolt since then, and yet I can not say that I have ever seen the time when I have regretted the choice. I think that is a fair statement to make. Still, it is not what I thought it would be, and if I had had the least idea of what it involved, at the age of nineteen when I made my choice, I never should have considered doing it by any possibility, because I should not have considered myself adequate. Perhaps it is fortunate not to know, because to know what it would mean, without being able to know what one could personally do about it, would be a very discouraging thing.

However, one goes into that profession for one reason or another, and by and by, after his studies are over, after his technical education is over, he finds that instead of being what he thought he was going to be—a minister to the sick, a student going on in a quiet path of usefulness—he is plunged into a struggle for life, a struggle that partakes in many respects of business.

If you know anything about doctors, you know that they would refute the charge that they are in business, not because of a distaste for business, but because the

professional standard of success is not profit. There are many respects in which a profession ought not to be a business, but there is no reason why they cannot come together on some basis and make all business a profession. If there are businesses and professions which hold themselves apart as being different, then that difference should be obliterated by bringing business into the category of a profession.

You see this question of business, the material aspect of the thing, is very important. We hear an expression used in the world—and I presume you have heard it, you know the general terms—ethics and ethical conduct. We mean by that the highest measure and standard of judgment as to right and wrong—the moral quality of our actions. A great many things take place in business that are patent questions and they are excused by the unthinking (and the unthinking includes a great majority of people), with the statement that these are *business* ethics—as though it was possible to have *business* ethics apart from ethics! To combine with others against your neighbor; to do this thing or that thing that injures; to be this thing or that thing that is disappointing, that is not square or true; this is excused on the ground that it is business ethics. Now let us from this time purge from our minds any question of business ethics that can be distinguished from ethics. I want to say this in passing.

We of the medical profession come right up against this business proposition because of our wares, our professional ability, whatever that may be. We have for sale our time, our efforts, our intelligence, the fruits of our study; they are for sale and you and yours buy them. Whether they are worth anything or not is open to question, and you judge them in very much the same way that you judge anything else, and consequently we get a business aspect.

It would be much more in keeping with the spirit of the physician's life if he had no wares to sell; if his wares were poured out freely. It would be a question what would be

the best way to do that, but after all it would be a comfort to physicians if they were not obliged to have any business aspect in their lives.

However, we have it, and the question is, then and there, what shall be done about the physician's work on that basis? That brings up the question of money. It has its place, it has its right. It is right that we should earn money. It is right that we should have money to provide for our needs. It is right that we should save money against our inability to work, and all that sort of thing. And yet it is very easy, of course, to be overpowered by the desire for money and the desire for the things that money brings. It is just as easy for a doctor to be overpowered with this sort of thing as for anybody else. The prospects are less, but the temptation is the same.

It has to be said in fact that the need for money is, with the doctor as with anybody else, one of the most stimulating factors in his life. It is true that poor men, men who start in poverty, as a rule do better in the practice of medicine than those who start with plenty. And of course that is pure human nature. The necessity to do is a greater incentive than the taste to do. As a consequence, we work harder under necessity than for some moral stimulus that we might have.

So that consideration again brings this question into a place that is important. And yet nobody would think of going into the profession of medicine for the sake of accumulating money, although that really happens to us now and then. Nobody would think of going into it for the sake of accumulating money, and nobody would think of going into stock jobbing for any other reason. Perhaps it is unfair to put it so strongly, but that is, after all, the fact. So in medicine money must be the least consideration. The fact then becomes this: Outside of the proper place that money has in all the affairs of life, the more it enters into the proposition of being a doctor, the worse off a man is as

a doctor, and so it should be put aside as outside of the category—and that leaves it.

If the practice of medicine is not business, what is it? I am not going to speak of or go into the scientific possibilities in medicine for the physician; that is not the point. What is the service that the physician renders to the community? That is the real question, not what service can he render to himself. What can he do for his fellowman? Those of you who have had any experience with the physician will have various ideas about that, but on the average you will agree that his first function is to alleviate suffering. It may be pain, it may be fault, it may be perplexity—whatever it may be, the first thing that a physician does, beyond all things, is to alleviate somebody's distress in some direction. It really sums up the whole function of the physician in the world. Whether it is the alleviation of a physical difficulty involving scientific knowledge, or whether it is a mental difficulty involving perplexity about the conditions of life, or whether it is a broad question of the development of children, or whatever it may be, the problems of life as they occur in the household are the problems which come into the hands of the physician.

The question then comes, Why into the hands of the physician, why not into the hands of the next door neighbor, or the lawyer, or the preacher? As a matter of fact, those various elements in the community do come into this discussion to a large extent and they do help in this alleviation of trouble, but, as we are organized, it is true that the physician is oftener called upon to give his advice upon propositions involving the concerns of the family life than any other man. Probably because his knowledge of the physical forces of the body enables him to judge of physical questions as an expert; probably because in connection with his studies his view of the mental questions of life becomes broader and more nearly that of an expert than that of any other man in the community; and partly because of his

wide experience with people of all kinds—the highest and lowest, the richest and poorest, the best and the worst—the real difficulties of life are brought to him.

Every gradation of society, if he is wise and capable of growth, gives him in the end a comprehensive view of humanity such as I believe no other individual in the community has an opportunity to get, and, consequently, such as no other individual really does have. That is why the physician is led into all this, not because he knows so much more but because his type of life gives him this intimate association with every kind of person, and gives him the broadest sympathy, the keenest judgment, and the largest fund of resources—as to what to do under given circumstances. And it is true that the physician consequently becomes the adviser of the particular part of the community in which he moves, and he grows broader, and finally sometimes comes to be very broad.

There is another point to all this—another side. We say people submit their troubles to the physician. Why? Because they are unequal to them; because the complexity of life is so great and the large majority of people are not equal to handling it.

All the trouble of the world originates and has to do with the family. Everything that you can conceive in the way of human suffering has its unit of activity, and its unit of suffering, in the family, and the consequence is that the physician is the individual who is most called upon, outside of the family, to participate in those matters. Whatever it may be, the physician is the individual who is called in for counsel and for help.

I am trying to show you that this question of being a doctor is not a mere matter of writing a prescription and going on. This being a doctor, if you are anything, is the being willing to be the confidential recipient of every human trouble, and the adviser, so far as in you lies, of every individual who has trouble. Of all the callings now known to

me, there is none which has so much possibility for high unselfish ministration to human woe as the calling of the physician.

And yet, I intend to call your attention to the fact that it is perfectly possible to ruin it by a loss of ideals, by a sinking of standards, by a selfishness of purpose, by making it a mercenary matter, by making it a means of self-aggrandizement, by any of the things that are unworthy.

By these means the whole thing is determined—the most useful calling or the least useful calling, according to the way in which it is used.

Delivered, Abraham Lincoln Center, Chicago, November 7, 1907.
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CIVIC PIETY

IF the situation in which I find myself this evening seems as strange to you as it does to me, you must all wonder what I can have to say that is worth your attention.

The theme in its general sense is hackneyed and whatever one says is in danger of being trite. There is neither side, nor shape, nor color, nor shade of this appeal to civic spirit, which is not as familiar to you as your daily paper. There is not a reason or an argument that has not been adduced a thousand times to dull your apprehension and lull your alertness. There is no direction in which valorous effort to achieve better things has not been made under your vision. There is not a degree of disappointment or futility that has not been forced upon your attention through years of civic development.

The question clearly arises whether the theme is not threadbare; whether the project is not unsound, whether the path to social accomplishment is not as yet undiscovered. Upon that query my mind has fixed itself times without number, and for an answer I have but one conclusion.

As a matter of talk, the thing has been overdone, but as to action—that is another story.

An eccentric young boy friend of mine, being persistently chided by his mother, when she said to him, "My boy, mother does not like to keep nagging at you," replied, "Oh, never mind, mother, I do not mind your nagging at all."

It is an epitome of the philosophy of inconsequent agitation. A bugle would lose all its power if it were used as a musical instrument. The call of the sentinel stands out as a dramatic episode in military life. If it were

repeated aimlessly it would be as any other prattle. And so, it is seriously possible to fritter away in speech not only the initiative but the elemental vitality of men, by the cheapening of emotion and turning of ideals into wax-works for exhibition.

Far be it from me to discredit the spiritual uprising to an eloquent appeal, but out of that very appreciation must come a shrinking from the repetition that leads through familiarity to contempt or at least non-attention.

But as to work, how shall we feel? Has what has been done been futile? Are the struggles of the faithful foolish? Is the comparative smallness of result really insignificant?

Let us realize the difference between minuteness and insignificance. What has been done in sociologic progress is but as a drop in the bucket, but that drop has colored the entire mass and is so significant that by its testimony we are carried back to our elemental faith, encouraged on and on to our best aspirations.

We like to think, and we take great comfort in the expression, that the people can be trusted. This respectable sentiment needs modification to have it of any worth. The fact is, that the people can be trusted awake, and the fact equally is, that the people are a negligible quantity asleep. It is upon this discrimination that the life of democracy depends. It is upon the tendency of the people to slumber that the abuses of organized society are rooted. It is upon the hope of awakening the people that the prospects of the future depend.

We have a theory of social organization, government, if you choose, which presupposes action through delegated authority. Our theory entitles us to repose in the belief that our delegates will faithfully and intelligently do their duty. The whole world is coming to a conception of altruism and philanthropy that lays upon the community the obligation to maintain a reasonable possibility of living, either by government management or common effort.

Under neither of these conceptions has the result been satisfactory. The effort of the people to maintain living conditions has by no means kept abreast of the difficulties which surge upon us through the development of our industrial life.

Our governmental function directed toward social betterment is too limited in scope and too vague in interpretation to even approximately keep pace with the difficulties. The people's delegates in official life are neither as intelligent nor as trustworthy as our theory demands. The fact is, so far as the demonstration of our government is concerned, we have not yet reached the point where there is any safety without unremitting scrutiny from the electorate. Whether we should ever reach such a point upon any theory is a question, but the voice of the people at this time needs to be heard unmistakably and unceasingly.

It has been said of many a politician and statesman, with more or less just reproach, that "he has his ear to the ground." What is ordinarily implied in that statement is distinctly a reservation upon statesmanship and a limitation upon independent thought. Moreover, history shows clearly enough that the movements of the people in mass and under emotion are unsafe and not infrequently unsound.

There is every reason why the machinery of the government should be so constructed as to permit deliberate action and thought on the part of the people, necessitating influence upon officials, somewhat indirect.

Right here lies the practical difficulty. We have allowed indirectness of contact, the presence of intermediate factors, to cramp our conception of personal responsibility. The same mental operation is to a very large extent responsible for the inertness of a community with reference to its social abuses. I carefully avoid using the word indifference. I do not believe that this community is indifferent to the woes of its submerged or even its overstrained members, but that it is inert, ignorant, and inoperative,

awfully so, in view of the vastness of its opportunities, I can not deny.

The warmth and sympathy of individuals who become enlisted in sociologic work fully justifies one's belief in fundamental interest. The heart-breaking tug that is required to enlist enough interest to determine effective and continuous movement is a sufficient evidence of the apathy of the people in general. How can we account for this contradiction? What is the reason that people who would care, do not care? That those who would help, do not lift a finger? That those who could furnish irresistible numbers, leave the work to a handful?

There must be some very good reasons, and what those reasons are, is worth painstaking study on the part of every person in this audience.

Bear in mind that there is a very great difference between a reason and an excuse. I maintain that there is no excuse. I have not the wisdom satisfactorily to set forth all the reasons, but I have a few suggestions which I feel disposed to put forth for your consideration.

In all the departments of our civic life, and this is particularly true of this country, there is one thing which impresses me deeply. Admirable as are the efforts and achievements of men and groups of men in various directions, the thing which operates most to limit effectiveness is the gap which is permitted to exist between phases of work which are related and should be in immediate sequence. In innumerable directions we do admirable bits of work, specialized according to the nature of the work. Almost as frequently the work falls short of its full result by reason of the fact that it does not "hitch on" to its immediate successor or predecessor, in the sociologic procession.

Let me illustrate: The dispensaries for the treatment of the sick undertake to afford a statement as to what is the matter and advice as to what to do about it. In the nature of things, the advice is for the most part useless,

because under the existing conditions the resources which we need, to be drawn upon for practical application of the advice, do not exist. Inestimable time, effort, and money are to-day wasted upon that illogical situation.

Our hospitals, really of high grade, and doing admirable service, from that restricted standpoint, abruptly terminate their service with the discharge of the patient, irrespective of his social condition, prospects, or resources. An enormous percentage of patients so discharged inevitably drift back again to the hospital, to pauperism, to crime, or to unknown things.

The necessity to connect relief work with that critical moment of discharge from the hospital is perfectly evident, and fortunately is now, in this community, being accomplished.

Upon these very same gaps in our political operations depend the possibilities for shiftless, ineffective or corrupt administration.

Whenever there is careful inquiry into the detail of administrative processes, the lack of coördination and economical coöperation becomes distressingly clear, and so, with reference to the electoral machinery, disconnected effort, no matter how well intended, permits almost unrestricted play of pernicious political intrigue to our infinite disadvantage. But for our purposes to-night, the chasm which is most impassable, which in my judgment accounts most satisfactorily for the lack of general participation in public affairs, is that which lies between the interested and willing citizen and the work which he sees but does not know how to do.

In politics there is an astonishing diffidence on the part of the average citizen as to even offering to mix in with it. In sociologic work there is a strong self-distrust on the part of people as to their fitness or ability to cope with it.

I have no doubt that the first step from private and personal pursuits to public and civic pursuits is the only

difficult step there is. The intelligent man or woman says, "Lo, this boundless task! Who am I? What can I do? How can I become a valuable instrument in this process?"

The question is pertinent and the answer to my mind is perfectly clear. Belong to something that works. Ally yourself with an organization or organizations which have serious purpose and are steadfastly pursuing it. If there is no organization which fits the need which you feel, make one, but whatever you do, do not stay on the outside.

Fortunately, there is machinery of which you can become an indispensable part. In every direction there are organizations, any one of which would offer you scope and inspiration. If the organization to which you belong is doing nothing, indict it, plead with it, reorganize it and vitalize it. Any concrete organization, no matter for what originally devised, will serve as a nucleus for civic enterprise. There exist in this city organizations grappling with problems of civic life that are unlike and unequalled by any organizations in the world. Every day in the week there are non-official congregations of men, dealing disinterestedly and solely with public affairs, with an earnestness and with an intelligence that is not found in any other great city in the country.

There is no excuse for the inactivity of the citizen who wants to do his duty, on the ground of lack of opportunity, and there is no excuse for the citizen who does not want to do his duty, on any ground.

What the organizations which now exist most need is workers, interested, earnest, efficient workers.

What they next need is money. I think I may safely say to any able bodied member of this audience that, as between your contribution in money and your contribution of yourself to any civic work, the contribution of yourself would be more valuable and more eagerly welcomed.

It is unnecessary to argue the limitation which there is upon the time and strength which the average citizen,

business man or home-maker can contribute. The individuals who can be suddenly projected into active work must have both reasonable amount of time and superfluous strength, but any individual who can not give of himself a reasonable measure, but who can give from his resources a portion, is under an absolute moral obligation to do it. What this should be, how it shall shape itself, is a matter for individual conscience, but the time is past when anybody can quietly sit back and say, "It is none of my affair."

The sense of responsibility must be awakened in the individual. Academic discussion has its place. Intelligence is the very root of improvement, but intelligence is not mere knowledge. It is understanding, and understanding comes by leaps and bounds, as one becomes actively enlisted in the work.

Discouragement comes too,—all phases of realization of personal and corporate inadequacy, but against that poison there is one certain antidote; that is labor, effort, determination to attack the next thing at hand, and conquer it or be conquered, but in any event to be alive.

As I have said, there is a special hesitation on the part of the average citizen in entering into political activity. Even where there is profound interest and conviction, one is embarrassed to know how to go at it.

The attitude of the self-appointed politician and of our elected officers varies all the way from patronizing tolerance to sublime contempt. Let us not blink the fact that our practical inefficiency justifies the one, and our unwillingness to make deep sacrifice permits the other. The refined and peace loving mind finds abundant justification in literature for holding aloof, but the citizen with insight and conviction will find as potent literary stimulus to uphold his ambition to do his part.

Channing wrote, "Politics, however they make the intellect active, sagacious, and inventive, within a certain sphere generally extinguish its thirst for universal truth,

paralyze sentiment and imagination, corrupt the simplicity of the mind, destroy that confidence in human virtue which lies at the foundation of philanthropy and generous sacrifices and end in cold and prudent selfishness." A wonderfully comforting sentiment to those who wish to withdraw from the struggle.

Alexander Hamilton, however, laid down this general principle: "The amelioration of the condition of mankind and the increase of human happiness ought to be the leading objects of every political institution and the aim of every individual, according to the measure of his power in the situation he occupies," and Wendell Phillips said, "Responsibility educates, and politics is but another name for God's way of teaching the masses ethics, under the responsibility of great present interests."

But way back at the beginning Cato declared, and this sentiment should be as much ours as his, "Some have said that it is not the business of private men to meddle with government,—a bold and dishonest saying, which is fit to come from no mouth but that of a tyrant or a slave. To say that private men have nothing to do with government is to say that private men have nothing to do with their own happiness or misery; that people ought not to concern themselves whether they be naked or clothed, fed or starved, deceived or instructed, protected or destroyed." It is our business;—no man can relieve us of the responsibility. No man shall gainsay our right to participate.

And now, in conclusion, let me say one earnest word. The attention of the people directed upon their government should not limit itself to criticism. The tendency of the inexperienced is to find fault.

The only way to be just in judgment of public matters as of private matters is to understand them. The only way fairly to judge your neighbor or your alderman is to know him,—not necessarily intimately, but fairly and with full knowledge of the facts.

We are prone to feel that virtue is its own reward and that a trustworthy officer needs no commendation, encouragement, or upholding. Nothing is further from the truth. Alderman after alderman has gone through the City Council, struggled, been honest, done his best, and retired in utter discouragement at the lack of appreciation shown him by his constituents.

What this community needs is not destructive criticism, but constructive coöperation.

A few years ago Howard Crosby said, "To let politics become a cesspool and then avoid it because it is a cesspool is a double crime. No man should be a partisan in the sense of one who votes for his party, right or wrong."

Have you no way to meet this? Are there no means at your hand to mobilize your integrity, to concentrate your interest, and to focus your effort?

Ask the man who is responsible for this organization which calls us together to-night. Reflect upon the lesson of these years of his activity. Consider the verdict that history will put upon his activities.

This community needs, needs badly and now, public sentiment that can be promptly and powerfully arrayed. Given the best of sentiment, the problem of bringing it into efficient operation must depend upon discipline. The way to discipline is through organization. The answer to the citizen who does not know how to bring to bear his powers, and asks his way, is, *Enlist*.

Printed in a work on Medical Biography, 1908.

SKETCH OF JOHN FAVILL, M.D.

BORN in 1819. Died in 1883. He lived and practiced in Madison, Wisconsin, from 1848 until 1883. He was a general practitioner,—in his later years, however, doing nothing of surgery, except in obstetrics.

He was born in Brockett's Bridge, town of Manheim (now Dolgeville), Herkimer County, N. Y.

He was of parentage directly American, the son of John Favill and Elizabeth Guile Favill, who were of English descent and remotely French.

He received a common school education, supplemented by several years at Fairfield Academy, and was graduated in medicine at Harvard University in 1847.

He was a member of the Wisconsin State Medical Society and was its President in 1872. He was a member of the Wisconsin State Board of Health from the day of its organization, 1876, until 1882.

In 1854 he married Louise Sophia Baird of Green Bay, Wisconsin, the second daughter of Henry S. Baird and Elizabeth (Fisher) Baird. They had four children, one of whom died in infancy. Those living are, Therese Schindler Favill, Henry Baird Favill, and Eleanor Burnside Favill (Tenney). The son is a practitioner of medicine in Chicago.

Dr. Favill died at Madison, Wisconsin, December 9, 1883, two days after a cerebral hemorrhage.

His writings were few, the chief being his President's address to the Wisconsin State Medical Society in 1872, "The Relation the Profession Holds and Ought to Hold Toward the Community," and "Mental Hygiene," contributed to the first proceedings of the Wisconsin State Board of Health in 1876.

Dr. Favill was preëminently a man of character; gentle,

deliberate, rational, resolute, and, upon a moral issue, inflexible.

His professional life was that of a general practitioner, in its early years partaking of all the vicissitudes of country practice.

He was not given to writing, but was an influential member of the medical societies and a regular attendant upon their meetings. His was the day of ardent opposition to all that was "irregular" in practice. Upon that issue he was pronounced and of deep conviction.

In his personal professional relations, he was punctilious to the extreme;—being a man of sound judgment in medical affairs and with profound insight into humanity; his counsel in abstract professional matters was potent, and as a counsellor in practice, he was widely sought and implicitly trusted.

His influence upon the ethical relations existing between the physicians amongst whom he practiced was signal. The profession, wherever he touched it, looked to him to ensure harmony and dignity, and without exception he was recognized as just.

Intellectually he was broad and profound, rather than analytical. His estimate of value in the current of medical thought, kaleidoscopic as are its changes, was almost unerring.

As an item of knowledge, the new was always interesting to him, and the sifting of fact from fancy, a matter of deep concern; but he was never carried away by spectacular discoveries, though he had singular prescience as to what was likely to prove true. And he possessed unusual judgment in the administration of medical resources already established.

In the broader field of human affairs, his mind was untrammelled by tradition. His utterances of forty years ago, markedly at variance with the prevailing thought at that time, stand out to-day fully abreast of the most enlightened opinion.

His views as expressed in his article "Mental Hygiene" might be the text for a modern discussion of that subject, fundamental as is the reformation it has undergone since his day.

This is thoroughly characteristic of him as a thinker, and in all directions his conception of an ethical problem, familiar as it would be to his friends through speech rather than by writing, is remembered as remarkably advanced.

It is as a friend, however, that his greatest contribution to the life of his community must be recognized. Neither the poor nor the rich, the able nor the feeble, were outside of his sympathy. To everyone his strong, well balanced, unselfish friendship was open. Charity for the evil-doer, patience with the arrogant well-to-do, and abounding respect for the poor strongly colored his life and his demeanor; and normally reacting to this, all sorts and conditions of men met him, each on his own ground, with open mind and heart.

In his family he was guide, philosopher, and friend, indulgent in impulse, clear in counsel, and patient beyond measure under the developing characteristics of his children.

The stamp he put on his community is indelible. His influence was always in the direction of self-reliance, rousing, encouraging, stimulating, but demanding from those he helped proportionate effort on their part.

The mark of these deep relationships of my father is still to be found widely distributed among lives separated from each other at every point but this: their recognition of the power of a noble personality.

Delivered, Memorial Services, Sunday, February 2, 1908, Music Hall,
Fine Arts Building, Chicago.

Printed, *Bulletin of the Alumni of Rush Medical College*, February, 1908.

NICHOLAS SENN AS A PHYSICIAN

THE career of Nicholas Senn illustrates that a man is not made by circumstances. The self-made man, as we call him, is a common enough figure, but the man who, out of unpropitious beginnings and inadequate facilities, steadily has forced himself not only to material success but to high and higher levels of scientific standard, is rare.

Perhaps the most noteworthy fact in the professional development of Doctor Senn is that his greatest and most enthusiastic scientific achievements were during a period when his daily toil in medical practice was the most burdensome. After completing his medical schooling and serving in the Cook County Hospital, he plunged into the thick of country practice. Promptly he was recognized as a man of strength and progress, and very early in his career attracted the attention and commanded the respect of the profession of Wisconsin. Steadily he forged ahead, not only in his private practice, but in public recognition. Interested, indefatigable and effective, it was but a question of a few years when he naturally and inevitably sought, in Milwaukee, a broader field for his activities. There he continued, aggressive, original, and inspiring.

I have never known a man whose capacity for sustained labor, not for a few days, but month after month, was as great as that of Doctor Senn. In this fact, coupled with his indomitable perseverance, lies the explanation of his remarkable production during the period from 1880 to 1895. His professional success, his leadership, his triumphant demonstration of his ability during this period, might easily have satisfied any ambition. To him these were minor

considerations. To be a physician was his passion, and he brought into his labors every contributory resource that was at that time available.

The effect of his commanding supremacy upon the profession of Wisconsin was pronounced. He never held the place of rival or competitor; he was the acknowledged leader, and young men drew from him inspiration and encouragement. In those days and in the later days of his brilliant medical teaching his precept focused not upon final surgical achievement, but upon the broad principles underlying morbid conditions. Generalization and the whole morbid picture was far more satisfying than his surgical technique.

Not at all early in his career did he become specifically a surgeon. Never in his career did he become only a surgeon. As he reached his full maturity, the dawn of scientific medicine occurred. He was amongst the first to grasp the enormous significance and possibilities of the new life; day and night he labored with the scientific problems of medicine, always with the broad relationships of the living organism as the background to his conception.

At this period he acquired the deep friendship and respect of Dr. Christian Fenger, and the picture of those two masters, shoulder to shoulder during those days of medical conflict, demonstration, and revolution, is never to be forgotten. The friendship furnished him untold comfort and inspiration in his scientific pursuit, and as a result of it the medical profession in the western states has profited inexpressibly.

In his early life he had an enormous experience in general practice. In his later life he unfailingly interpreted his surgical problems in the light of his broad medical experience. Those who have encountered him realize that there was no territory of general medical thought in which he had not an expert judgment. Voluntarily putting aside all that was not specialized work, he nevertheless was

competent to assume any medical responsibility, and to this fact is due largely the notable conservatism which characterized his surgical views.

No man knew better than he the triumphs and possibilities of operative management. No one was less carried away, by enticing possibilities, from the sound footing of medical judgment. In many directions, the evolution of medical thought went past him, fell back of him, and finally stands at this moment abreast of a position which through it all he steadily maintained. To his breadth of view as to the human body, in other words, to his all around development as a physician, is due this recognized soundness.

In other directions not technical, in the broad human relationships between doctor and patient, he maintained an equal poise. Occupying a position where he could have arbitrarily commanded extreme material rewards, he habitually maintained a conservative attitude. His patient's real interest was his interest, and he rarely was beguiled into the sophistries of modern professional relations.

To the mind unaccustomed to consider medical specialization in its effect upon individuals, these reflections may not seem so important, but to the medical mind fully appreciating the dangers and disadvantages of too narrow lines of thought and activity, the characteristics of Doctor Senn stand out not only as noteworthy, but as offering a demonstration that breadth and depth are not incompatible.

Surgery owes him an inexpressible debt, but those who knew him best, and particularly during the greater part of his life when he was an active factor in general medical affairs, know that his greatest contribution to the interest, intensity, ideals, and scientific conception of medicine was as a physician.

Delivered, Second Annual Banquet, Wisconsin Society of Chicago,
December 15, 1910.
Printed, Annual Report.

OUR LAKES AND WOODS

I AM more than gratified at the gentle decency of your toastmaster's allusion to me. Inasmuch as he has known me intimately under conditions which try men's souls, I consider the gentle irony of his remarks to be rather a peace offering. In fact, I am disposed to paraphrase Kipling's couplet in the "Fuzzywuzzy" and say, "All that I have got from 'im is pop to what he might 'av made me swaller."

The fact is, in so far as I have either initiative, capacity, or inspiration in wood-craft and mountain lore, I acquired them under the skillful tutelage of your accomplished toastmaster. I will not pretend that it was an easy school of instruction. He is critical, rigid, and infallible. That he is a mighty hunter, no one doubts. That he is an interesting and convincing raconteur is a matter of record. The fact that in the bosom of his family he is known as "Opie Dilldock" is no qualification of my statement. He is essentially a veracious chronicler and his lore is subtle and intense. His is not the crass observation of the stumbling lumberjack, nor the sentimental claptrap of the amateur "outer." His is the keen eye of the falcon and the cunning of the fox. In the woods he sees everything that is there and much that is not, and in the refinements of his observations will put to test and to shame the faculties of ordinary men. So, when I pay him this tribute, I at the same time record my gratitude that he has not told all that he could.

He and I were boys together in Wisconsin, in the same town, with the same lakes and woods and fields and hills upon which to acquire our facility and from which to derive

our springs of enthusiasm for the beauties which Wisconsin can offer. As I recall those early days, no life that could be offered to a boy seems to me more ideal; the broad expanses of water in which to swim and sail, of ice on which to skate and ice-boat, of woods in which to roam, of hills upon which to coast, of surrounding marshes and water-courses in which to hunt; it seems as though everything was there that could be asked.

As I go back to it now, it is true, the lakes do not look so large, the hills are not so high nor so steep, the woods are gone, and the general touch of settlement and civilization has wiped out much of the original beauty and freedom, but after all, the memory of those early days can never be effaced and the joys of that boyhood never excelled.

In those days, I had a very vague idea about the magnificence of Wisconsin. To be sure, Madison was the capital, the seat of government, of education, of courts, and a place of general importance. I suppose that my outlook was broader than that of most boys from other parts of the State, in consequence of these facts. I had a considerable knowledge of local State history for various reasons. I knew the natural boundaries of the State; that it was bounded by Lake Michigan, by the Mississippi River, on the south by the greed and dishonesty of Illinois, but never, until I was introduced into the woods of northern Wisconsin, did I realize the essential reasons for its northern boundary. To those who live in that country, it is often a question why the northern peninsula of Michigan does not belong to Wisconsin, as it geographically ought to. To those whose knowledge of that country is gained from the study of railroad folders, the idea is common that there is no land at all in northern Wisconsin, but a conglomeration of lakes, streams, and marshes. To none of these does it seem clear why the boundary is as it is. One who knows the lay of the land realizes that there is an essential reason. Along

the northeast boundary of Wisconsin there is a watershed. Upon this side of the Wisconsin boundary the water enters into Wisconsin. Upon the further side the water flows into Lake Superior. On a pinch this might be regarded as a natural division, but it would be artificial. The gist of the matter is this: On the Wisconsin side of that watershed is found the intrepid muskelonge. On the Superior side of that watershed is found the base imitation, the pickerel. This constitutes the essential reason for this State boundary line. Wisconsin has chosen for her sons the game worthy of their metal; she has handed over to her neighbors of less sportsmanlike quality one fitted for their metal; and so, I say, that Wisconsin is bounded on the north by the muskelonge.

And now, let me say in all seriousness and with a conviction profound, that northern Wisconsin has to offer to the world a priceless treasure.

For many years I have cherished in my memory a treasure of literary thought that has been a source of incalculable treasure and profit. The woman who wrote this beautiful story is Harriet Prescott Spofford, and inasmuch as I proffer it from memory it may not be quite accurate, but I am more than glad to pay the tribute that I owe to this author for the inspiration that lies in this quotation.

The story is of a young American woman, married to a foreign noble, and when about to be delivered of her first child, she goes under traditional guidance to the ancestral castle. There, in the perturbation of her troublesome days, preceding and following her trial, she is struck with a measure of horror at certain of the endowments which she feels her child must have. She recognizes her child as the offshoot of a long line of more or less decadent aristocracy and feels the accumulated weight of civilization's weaknesses as they surround her babe, and during this perturbation of mind she has a dream, and in her vision the various ancestors, represented in portraits about the hall, seem to step from

their frames and come down and give to this babe their various gifts, and as each one, of whom she knows the more or less sinister history, makes a bestowal upon her babe, she has a renewed thrill of terror. What can they possibly give to her child which would not be a burden and a menace? But finally there steps down from her place the ancestral mother, semi-barbaric, uncivilized, untrammelled, and untouched by the deteriorations of that social system, and she seems to pronounce over this child these words:

"Waken, my manchild, and take from me, thy first mother, my gifts, thou child of all weather and of out-of-doors. I give thee will and might and love of the undefiled. I give thee strength of my rivers, my forests, my seas, my sunshine, my starshine, and of my heart. I cleanse thee. The slime of long years shall drop from thee. I start thee afresh, newborn. At night, in my star-hung tent, the gods shall visit thee. By day thou shalt walk in ways to become as a god thyself. I give thee scorn of the ignoble, trust in thy fellows, firm belief in thine own lusty muscle and unconquerable will. I make thee familiar friend of hardship and content, spare and pure and strong. I give thee joy of the earth, the wind, the sun, and belief in the unseen. This is thy birthright."

To be possessed of the spirit of that benediction is to be turned back free and untrammelled upon the elemental paths of human experience, stripped of the dross of competitive life, strengthened by the sense of fundamental heart-given power, and inspired by the vision of that perfectly attainable simplicity which belongs to the clear eye, steady head, and decisive acts.

Every thoughtful man has periods of discontent in which he recognizes the limitations of social existence and longs for that freedom of mind and body which gave character to his ancestral type, which has been lost in the developments of civilization.

Often this longing is not clear enough to be recognized.

Usually, through force of circumstances, it is smothered by immediate difficulties. We reach out with childlike eagerness for something, we know not what, that will bring us into communion with what Kipling calls "The Trues," with more or less helplessness, or stumble along knowing not the path, and so adhering to our wonted way.

Perhaps there are many ways of reaching out into life to satisfy our craving for a simpler, truer, and more dignified experience, but of all the ways that present themselves, none has more to offer than that which leads into the wilderness. There lie all the charms and hardships, all opportunities for patience and fortitude and joyousness and oblivion. To one who interprets the call of the wilderness truly, it speaks in terms of simplicity. It has to offer no pampering luxury, no belittling trivialities, no useless pastimes. The wilderness demands of her devotees willingness to meet her conditions, strength, courage, judgment, and patience, but when she finds these offered upon her altar she returns in many fold and lavishes her rewards.

If you furnish the courage wherewith to endure hardship, in the end she will furnish content. It is that achievement, the gift of being content under conditions of discomfort, that is worth all the price that one can pay for the experience, and so I say that Wisconsin, with her wonders of wilderness, offers to her sons and neighbors an opportunity, to come back out of that maelstrom of civilization confusion into the clear waters of elemental purity and power. She invites them to assert and appreciate their kinship with all the things that live, to reach out into the universe and feel a sympathetic touch with the beasts of the field, to aspire to a strength and self-reliance in which the merest infant of beast surpasses the wisest man.

So far as I know, in no other way can one approach this strong and self-respecting footing except by meeting and coping with adverse physical condition.

In no other words can I so fitly sum up this feeling as in those of our Comrade Badger, Hamlin Garland:

“Do you fear the force of the wind,
The slash of the rain?
Go face it and fight it.
Be savage again.
Go hungry and cold like the wolf.
Go wade like the crane.
The palm of your hand will thicken,
The skin of your cheek will tan.
You’ll grow ragged and weary and swarthy,
But you’ll walk like a man.”

Delivered, February, 1911.

SUPPORTING THE CANDIDACY OF
C. E. MERRIAM FOR MAYOR
OF CHICAGO

THE medical profession has awakened to the idea that it has a duty to the public of far wider significance than its ordinary function of treating disease. In recent years it has become evident that there are possibilities in prevention of disease—in preservation of health—that outweigh the possibilities of cure of disease an hundred fold. To the propagation of this intelligence, to the effective advancement of practical sanitation and hygiene, the medical profession is committed. As time goes on, the measure of usefulness of medical science is destined to be its power in accomplishing real protection of the public against all forms of disease. The physicians are the natural leaders in this movement. They are educated in the facts, experienced in the problems, and charged by society with this responsibility. Can they shirk it? The fact is, that the medical profession is not shirking it. The further fact is, that the effort is one attended with the gravest discouragements, and we may well ask, Why?

There are many reasons, but one in particular is fundamental and almost universal. It is failure on the part of administrative officers and bodies to see the importance of the matter.

Protection of the mass of the community can not be reached without an active and determined policy of administration. Not only must the governing power be open to the truth in these matters; it must be aggressive in its measures to combat conditions that endanger the citizens who are helpless as individuals to raise a finger in their own defense. It is difficult for those who have not practical

experience to realize that disease is to a large extent preventable, to a moderate extent controllable, to a small extent curable.

The waste of disease from any point of view is appalling. The medical profession utters its loudest protest against conditions that permit and encourage this indefensible weakness in our social conditions, and as individuals they can do no more. The result is, that physicians find scope for their efforts to insure the public weal, and encouragement in the barter, just in proportion to the intelligence, honesty, and fearlessness of the public health policy of any administration, National, State, or Municipal.

An administration that has a clear conception of its duty and freedom to perform that duty can give to every physician full measure of opportunity to coöperate. An administration that has not that conception, or that is hampered by political bonds that make its policies weak and futile, must of necessity stifle individual effort to act for the general good through the channels of government.

On the other hand, no administration of the health policy of any community can be a success without the cordial coöperation of the physicians. The most important question that a physician can face in his decision as to where he should place his allegiance in a municipal election is, What is likely to be the situation upon this gravest of matters? It is not a fit subject for prejudice or partisanship. It is a question involving the deepest welfare of the community and the most profound sense of obligation to protect it.

We are in the midst of a fierce struggle to elect our municipal officers. Never have the issues been clearer cut than they are to-day. The Mayor is the controlling force in this question of public health policy. No ability on the part of his appointee is of any avail if his policy is not beyond criticism. Such a policy must be intelligent and free. No idling behind the defenses of traditional methods, no

helplessness under the weight of political shackles. The physician who values his usefulness in its broader aspects must himself answer this question. In this campaign, who is to be relied upon to see his responsibilities and to be able to fulfill them?

Upon every citizen that question ought to weigh. Upon the physician it is a specific burden. He knows the need. He knows the complexity. He knows the history of the past. What will he decide? This is not a mere question of who shall be the Commissioner of Health. It is far greater than that. It is, Shall the force to whom is entrusted the active work of the department be selected upon the basis of competency, or upon a basis of "influence?" Shall the work of the department be untrammelled or shall it be rejected to the pressure of political expediency?

The answer that the citizen can give to these questions should determine his decision as to his vote and influence.

For me, it is clear. Charles E. Merriam is a man of the broadest training in the science of government. His interest has been in human advancement and not in politics. His clear understanding of public questions led his fellow citizens to push him into politics. Being there, his views are clear, sound, and practical. He realizes that no subject is more important than the Public Health. His attitude will be unequivocal and his policy all that can be desired.

Will he be able to carry out his plans? Why not? He has not given one promise. He has not bartered for one office. He has not bound himself by one pledge, except to serve the people. That is his distinction and his strength. He is known to have sound knowledge of office. He is known to have high ideals. He is known to be free. Could anybody be more safe?

For no class of citizens are these issues clearer than for physicians.

Printed, *Survey*, May 6, 1911.

REMARKS ON THE REPORT OF THE VICE COMMISSION

THE printed report of the Chicago Vice Commission is a remarkable document. Those who have been aware of the activities of the commission are not surprised at the thoroughness of the work described. To anyone unfamiliar with existing conditions this exposition must be a tremendous shock. To set before the average citizen in unequivocal terms and in detail unmistakably reliable the facts of the underworld is a task enormously difficult, deeply instructive, and as a rule thoroughly distasteful to the citizen. All of these things pertain to this report.

There is more, however, to the work of this commission than mere industry or insight. The report sounds a clear, courageous, and more or less hopeful note as to what to do. It is, of course, obvious that the recommendations are not uniformly clear as to desirability. There can be no question that agitation, education, and the correction of public sentiment are fundamental to considerable and lasting reform. There can be many questions and differences of opinion as to the recommendations of immediate procedure intermediate between the present status and a future regeneration. Nevertheless, the commission advises, positively, steps of immediate procedure representing its judgment as to what is both feasible and effective.

In view of the uncommonly strong makeup of the commission, these recommendations should be received with the greatest respect. The tendency of men, in particular those who have general knowledge of these subjects, is to shrug their shoulders. The generalities as to what "always has been and always will be," "human nature," and all that line of talk which comfortably disposes of the whole matter

by doing nothing, are too familiar to require discussion.

This supineness is not necessarily indifference. It is to a large extent discouragement born of observation as to the futility of social agitation. The view is superficial. Futility is apparent rather than real. An undercurrent of reform is obvious to students of the situation.

It must be borne in mind that the commission is neither questioning history nor attempting to change "human nature." It is endeavoring to discern in the light of history and human nature what is to be done with a pestilence which has assumed abnormal proportions in the course of the developments of civilization, and whose bearings and interrelations are by reason of our present stage of evolution different from any propositions which history or human nature has hitherto presented.

The great difficulty in reform movements is in correlating and stabilizing the machinery of correction. This, the commission means to secure by a fixed commission as to policy and a fixed court as to current dealing. The faint-hearted will look upon these things askance, as likely to be ineffective. The sinister elements will of course oppose them. But the merit of the situation will lie in having boldly uncovered the matter and established machinery which shall deal with it in the open, thereby on the one hand limiting the quasi-criminality of the police and administration connivance or profit-sharing, and on the other keeping awake the civic sensibilities of the public, which hitherto has taken refuge and received comfort in ignorance.

The recommendations are worthy of trial and the work of the commission beyond measure to be commended.

Delivered, Fourth Annual Boys' Dinner, Chicago Association of Commerce, December 21, 1911.

Printed, *Chicago Commerce*, December 29, 1911.

WISHBONES AND BACKBONES

IT is rather customary for us elders to deplore the non-continuity of our wisdom; to deplore the fact that our sons do not listen to us, do not learn from us, do not profit by our experience. Many of us have come to think that that is inevitably inherent in the nature of the boy and man relation. Many of us have come to think that that is desirable upon the hypothesis that a boy can not learn except by experience and that he can not really have a sound footing until he has been knocked down a few times.

I believe neither of these things to be true and I consider it really a great waste from a humane standpoint that we who have worked so hard, felt so much, suffered so much, and enjoyed so much, should not be able to start our boys along farther in the race than we were started. And although it is not true that they do not start farther in the race than we started, it is true that they do not start as far along in the race as they might.

But is this voluntary with them? Is it because the boy is incorrigible or bullheaded or wilful or conceited that he is not able to avail himself of these fountains of wisdom which we offer him? How well, gentlemen of the elder class here, have we done our part? How clearly have we blazed the way? How honest have we been in letting the boys see the real foundations of our experience and getting the real picture of our life struggles that we are trying to impress upon them for their benefit? I maintain the fault is not with the boys. The fault is with us, and with a much too large extent are we letting authority stand for instruction.

In this country more than in any other country there is

one war cry, a rallying cry for almost all people, and that is business; and there is every reason why it should be so. In the first place, it represents the dignity of employment. In the second place it represents the method of the maintenance of our individual status and strength in the community. It is but another expression for commerce which history will show us clearly is the absolute measure of the development of the human race.

Commerce has come to be the measure, the mark of civilization; and so business or commerce or all of the ideas involved in that indirect mixture of thought have come to have for the people of this country an enormous authority and an enormous value. It makes no difference where we look, whether to politics, religion, or philanthropy, or sociological development of any kind, wherever the figure leads us we find ourselves always correlating to the question of business. What is the business aspect of this particular problem?

I am not going to quarrel with that status nor to take any considerable exception to the frame of mind of those who are sharply responsive to that idea, but I do want to take occasion to call the attention of the young men who have not fully analyzed this subject to the fact that there are two sides to that question. Commerce and civilization going hand in hand represent the dominion of man over nature, if you like, over things. They represent the utilization of our resources, the command of the difficulties of life. They represent all of culture, they represent all of the features of comfort of living, and to that extent they are almost to be worshipped as being of worth and dignity. But this is the thought that I want to put in at this point, namely, that the dominion of man over things always goes hand in hand with the dominion of things over man. There is the point where the checking up in this situation falls on the shoulders of those who are intelligent enough and thoughtful enough to see it.

The establishment and utilization of great resource goes hand in hand with the greed that gathers in those resources for the future. The establishment of great elements of culture or comfort or physical well-being goes hand in hand with that enormously exaggerated tendency to exploit and display the resources available to us, leading us to that much deplored ostentation to which the so-called higher grades of civilization are prone. And more than that, the very possession of all the possible facilities for comfort, for enjoyment, for convenience, for time-saving, going into our general estimate of happiness, deteriorates with hardly a turn of the hand into the most destructive luxury, and therein lies perhaps the most important danger and menace to the American people to-day in the ranks of those who are fortunately situated as to material things.

The tendency to develop goes hand in hand with the tendency to degenerate, and whether it is mental or moral or physical, the effect of undue availability of the luxuries of life is the most damaging and the most dangerous thing which we as a people have to face. So it is that the Association of Commerce as a representative of the people finds itself under the obligation to maintain the integrity of its field of influence, whatever that may be, by a rigorous scrutiny of the elements which enter into its activity, and a determination to eliminate from the field of its activities those things which it regards as pernicious. And the Association of Commerce, as it budded forth into its full manhood from its somewhat recent youth, came to see that it was necessary that it be something more than a commercial organization; that it was necessary for the full development of its function in the world for it to have very distinctly a purpose. This is no more true of the Association of Commerce than it is true of you or of me. The fact is that the determining fact of life so far as men and women are concerned is the purpose of the life, and the purpose of the life is a very definite and distinct one.

Let me call your attention to the fact that there is a great difference between a desire and a purpose. There is a great difference between a wish and a will. Why, you know the old saying—I don't know who said it—"Never wear your wishbone where your backbone ought to be." That is the keynote of the development of character in men or in organizations, and this organization saw that very early. What did it do?

The first thing it did, by some process or other—and I would be too personal and would be regarded too much as retaliating upon your courteous toastmaster, if I were more personal about it—by some process there awoke in the association a civic conscience, and it has developed enormously. It is hard to find a simile that fits it in dignity and worth. The Association of Commerce early came to see that the affairs of this world perhaps were not everybody's business because if everybody's business is nobody's business the Association of Commerce declined to accept the conclusion, and decided right then and there that anything that was not distinctly anybody else's business was its business, and from that time it has been its business.

In the very beginning this was foreshadowed, but it has come on in recent years, particularly in the last year or two, to the point where the Association of Commerce does not hesitate to take cognizance of any public question whether it is distinctly a commercial question or not; any question which affects, as Mr. Wheeler puts it, the shareholders of this corporation, becomes the object of scrutiny and analysis and dealing with by the Association of Commerce in some fit and taking way.

Such a thing as this has never happened before to this extent and with these results in any civic body that ever existed. The result of it is that the Association of Commerce has determined for itself a status and a position in this community, the influence and importance of which can not be measured.

Early in the game it put to itself this question: "Am I my brother's keeper?" And following along the genius of civilization, following along the thought that has come to dominate all serious and right-minded people in the world, it answered that question affirmatively, "I am my brother's keeper to any extent that my obligation indicates." But beyond that came this question, as it always comes as the concrete development of that query: "Not only am I my brother's keeper, but am I my own keeper?" because every man comes to see that in any community, great or small, but particularly in a great complex community like this, there is no such thing as an isolated evil. There is no such thing as an evil or a pernicious process or a vicious spot which can stay where it starts. It does not make any difference whether we are talking about the vice district or the saloon question or tuberculosis or contagious disease of any kind, or wages or strikes or what it is, there is not a question that can arise in a community like this that does not become inevitably and immediately a question of the whole people.

You can not keep segregated any festering spot in the body politic. Therefore, the Association of Commerce has said, definitely and distinctly and aggressively: "These things are our business, and we will deal with these things just in so far as we are able. So it comes about that the Association of Commerce deals with the question of politics in its broadest sense, by influencing where it thinks it ought to influence the administrative bodies. The question is, if we elect administrative bodies, ought they to run their affairs and our affairs? And the answer is, in a limited way, yes, they ought to be responsible and held responsible for the proper execution of their trust. But beyond that limited way, the answer is, no, there is no administrative body that is as wise as the whole body, and there is no administrative body which will not be better for the aggregate thought of this organization expended upon any particular

proposition. And, therefore, this organization does not hesitate in a proper way and by its proper delegation to undertake to advise our administrations—our administrators—as to their duties in matters of policy.

So it is with reference to our great questions of charity, the administration of our charities, those sore spots in the community which absolutely are so fundamentally and vitally necessary. The Association of Commerce goes right to the root of that matter in half a dozen distinct ways for the purpose of establishing the fact that that business is our business in so far as it is distinctly nobody else's business. So you see what an enormous ramifying structure this organization has grown to be and will grow to be. You see that it is a great big tree whose branches reach in every direction, a central body whose roots reach in every direction, a thing absolutely of necessity, vital and alive, or else it would stop.

Now to the young men in this organization I want to say that the Association of Commerce offers you great things in your personal relationship to it in the future. It offers you opportunity. It offers you standing. It offers you business help, advice, and coöperation. But let me say to you frankly that the Association of Commerce needs you a great deal more than you need the Association of Commerce. Because the young men of the world are the roots of the tree, and without vitality at the root, without that vitality that can liberate nourishment for the whole structure, the thing will die, and, though we are liable to forget it, it is absolutely to the boys, and even down to the children, that we must look for the integrity of what we have created and for the progress in the future.

Why are the young men so vital to the progress of things of this kind? Is it because they have energy, or time, or ingenuity, or ambition, or any one of the things that may enter into the complex of the strong man? It is those in a measure; but mark you, far and away beyond the values

that inhere for young men in any of these or in all of these that I have mentioned, far and away beyond them lies the fact that young men have ideals, and they stick to their ideals and they are governed by their ideals, and they can not be governed by any other method. Now, that is the reason why the hope of the world not only lies in young men, but justifiably lies in young men. They have not lost through the conflict with the world that keenness of perception as to their ideals. They have not had ground off the sharp corners of distinction in their ideals that we who have had more experience have had ground off. They are not compromisers, they are not anything in the nature of trucklers or cowards.

Young men can be handled, not by pressure, not by coercion, not by cajolement, but only so far as my observation goes, in any broad way, through their ideals. And for that reason the Association of Commerce is looking to its young men. Representing the whole of society by the figure of the tree, we must find the roots vital, alive, and furnishing to this structure the sap of idealism, in order to have what is true life, the combination of experience and ideals. So the wise people of the world have seen always that the thing to do is to look to young men, and to lead young men, to inspire young men, to school young men, and finally and greatest of all, to trust young men."

Delivered, Chicago Society of Medical History, March 14, 1912.

EARLY MEDICAL DAYS IN WISCONSIN

IT happens occasionally that I fall into conversation with some of my old Wisconsin friends, particularly those of my own age, and oftentimes physicians and sons of physicians, with whom I undertake a kind of reminiscence to which we are all prone when the opportunity arises to discuss the things of our childhood. As the talk proceeds we find ourselves dwelling with great earnestness and with very distinct admiration upon many of the figures which have been prominent in the early history of the medical affairs of Wisconsin. Then almost inevitably before we have done with these reminiscences we arrive at the conclusion, either expressly or by implication, that "there were giants in those days." Just what we would mean by giants is perhaps open to question, and just how clearly our prejudiced view can have been determined by the actual facts, is perhaps again open to question, but it is interesting to reflect upon those other days and to pass in review the figures in society which gave to those days their significance.

The more I have thought about it recently in the light of a possible criticism of my opinions, the more clear I have become, that there were qualities exhibited by the men of those days, so permanent and so outstanding as really to justify the estimate which I have just given.

It is a very difficult comparison to draw, which involves setting in contrast men of different generations, in respect to any of the qualities which are subject to variation under the development of knowledge and technical skill.

Probably there is no department of human knowledge in which the foundations have so radically shifted as have those of medical science. To compare a surgeon of the '50's with a surgeon of to-day involves a fundamental estimate of

character, utterly ignoring the entire territory of audacity in process or success in results.

It is, of course, impossible to make a just comparison, and yet we are prone to dispose of the knowledge of other days with a self-satisfied superiority, and to assume that though all our predecessors did the best they could, they did not amount to much. It is, therefore, fruitless to attempt to maintain the high estimate of the old guard by any analysis of their medical skill.

This, however, is not so true of general medical practice as it is of scientific attainment or surgical practice. The practice of medicine has always been and perhaps always will be a decidedly empirical matter, and it would not be an unjust method, if it were possible, to estimate the relative empiricism of that day and this.

I am very sure that, whereas knowledge from our present point of view was very much lacking in those days, wisdom was much in evidence. As I retrace mentally the steps of experience that I have had with the physicians of the old school, and arrange the facts and experiences of the still older days that have come to my knowledge, I reach the conclusion inevitably, that the thing which impresses me so strongly as to the quality of the earlier physicians, is their capacity for serious thought, for these men took life very seriously. Not only was their attitude with regard to their medical responsibilities grave and deliberate and anxious, but the things related to their internal professional life, to their external professional relations, to their standing amongst themselves and before the public, were matters of the deepest concern.

It is perhaps as impossible justly to estimate the men of different generations upon moral questions as it is upon technical questions, because the canons of morality in many respects are as shifting as are the dicta of science. It is nevertheless pertinent to call attention to the fact that there was in these men a tenacity of purpose in maintaining the

dignity of the profession, and an uncompromising and fearless determination in maintaining ethical standards of all sorts, that is by no means generally found in these days. To what extent the modifications of modern days may be right or desirable is quite beside the question. The point is that those men had conceptions and convictions, and that they stayed by them with a vigor and singleness of mind which one now rarely sees in any professional field.

It is impossible to generalize about the whole profession of any State at any period after it is large enough to be somewhat diffuse, but those of us whose familiarity with the subject began in the '60's or '70's will always hold, as outstanding, a group of men, distributed about Wisconsin, whose force and influence and quality we have never seen surpassed.

It is noteworthy also that these men were not particularly related to the cities, and it would be invidious to cite individuals except with the explanation that these were typical of conditions and by no means included the entire list of significant men. For the sake of the more intimate significance belonging to personal acquaintance, I name a few of the men whose elder years lapped over upon my younger professional years. In Green Bay there was Brett; in Berlin, N. M. Dodson; in Appleton, Reeve; in Fond du Lac, Griffin; in Milwaukee, Dousman, Wolcott, Marks, and Bartlett; in Lake Mills, DuBois; in Oregon, Fox the elder; in Racine, Machan; in Janesville, Whiting; in Madison, Chapman and Favill; in Mineral Point, Van Dusen; in Portage, Meacher and Waterhouse; in Prairie du Chien, Mason. Every one of these men was a factor in building up a coherent, high-minded, and competent medical society in Wisconsin.

When one undertakes to analyze the conditions under which practice was done in Wisconsin from 1840 to 1880, and has a full realizing sense of the actual day to day difficulties of pioneer practice, he will see that what these men

did was not only significant, but deeply vital, and projected by them consciously as their contribution to a stable development of professional standards which they intended should be worthy the heritage of professional values that were to them of paramount importance.

The history of the beginnings of the Wisconsin State Medical Society is significant of these conditions. It is to be borne in mind that when the Medical Society was founded there were practically no railroads in Wisconsin; that communication was by wheels, or runners, or on horseback, or on foot. Many a man started practice in Wisconsin in those days with only a horse and no saddle, and one or two strong men I have known without even a horse, making their long trips on foot. It is historic that Dr. Van Dusen of Mineral Point, who never missed a meeting of the State Medical Society, would drive from Mineral Point to Milwaukee and back, occupying two or three days in going each way, for the purpose of attending a meeting of the Society. Though this is perhaps the most signal act of devotion to what was to him a high ideal, evidences of sacrifices of that character were everywhere displayed by the men who were in those pioneer times imbued with the idea that they owed to their profession obligations which were paramount to all personal considerations.

These were the days of punctiliousness upon matters of professional ethics. This was the time of the deepest feeling over what was to them a most profound and obnoxious heresy, Homeopathy. Here was crystallized the doctrine upon which they founded their ethical status: "Homeopathy is absurdly false. He who actually believes it, is an ignoramus. He who does not believe it and practices it, is dishonest. Out upon him in either case. We cannot countenance consultation in either case."

Whatever modification of principles or practice with reference to this question has come in recent days is immaterial. We have but to consider the integrity of view and

motive which actuated those men in those days. It was not to them a matter of likes or dislikes, or a matter of expediency, or a matter of ability; it was a deep moral issue, and from their premises there was nothing in the way of compromise that was excusable.

Tolerance is rarely a virtue. It is, as a rule, a matter of adjustment based upon a growing recognition of mutual weakness, and a consequent diminution in relative inequalities.

So in other matters of professional conduct, these outstanding men were punctilious. The fine shades of fraternal ethics, the dignified function of consultation, a consecration to the relief of the needy, were all defined and refined in ways which we rarely see now. These things were not matters of deliberate plan or study. They were the outcropping of character, and it is in respect to character in the last analysis that we find ourselves designating them as "giants."

The growth of the Wisconsin State Medical Society is very significant as to the value which may lie in professional organization.

In the year 1841 the Legislature of the Territory of Wisconsin passed a bill providing for the organization of county and district medical societies and incorporated The Medical Society of the Territory of Wisconsin. This bill was approved February 19, 1841. The preamble to the bill was as follows:

Whereas, well regulated medical societies have been found to contribute to the advancement and diffusion of true science, and particularly of the healing art, therefore,

Be it enacted, etc.; and then, be it further enacted that Bushnell B. Cary, M. K. Darling, Lucius F. Barbour, Oliver E. Strong, Edward McSherry, E. B. Wolcott, J. C. Mills, David Walker, Horace White, J. P. Russell, David Ward, Jesse S. Hughitt, B. O. Miller, and their associates are hereby authorized to meet at Madison, the capitol of the Territory of Wisconsin, as the

Medical Society of the Territory of Wisconsin, and when held under such name shall be a body politic and corporate; shall have perpetual succession; and be capable of contracting and being contracted with, issuing and being issued, defending and being defended, pleading and being impleaded, in all courts of law or equity; and may have a common council and alter the same at pleasure; and shall be capable of holding estate, real, personal, or mixed and also to loan, let, or sell or convey the same, provided that the property owned by the said association shall not in the whole exceed ten thousand dollars (\$10,000.00); provided also that said Society shall be compiled exclusively for the promotion of medical science.

The majority of the said incorporators met at Madison at the proper time and organized the Medical Society of the Territory of Wisconsin and the society held meetings annually. The records of the meetings, however, prior to 1847, appear to have been lost and there is now no trace of them.

On Tuesday, January 12, 1847, the society met at Madison, and there being only a few present, little was done. Dr. M. C. Darling was the president incumbent, and Dr. J. C. Dousman was elected to succeed him; Dr. Henry Clark was secretary *pro tem*, and Dr. C. B. Chapman was elected recording secretary for the ensuing year.

The organization of the Society is indefinite but it is implied in the following statement that it consisted of temporary and permanent members as this memorandum shows. Dr. C. B. Chapman of Madison and Dr. E. A. Mulford of Walworth were elected permanent members of the Society. Dr. Wolcott introduced a resolution, as a by-law of society, "that membership be forfeited if a member does not attend for two years." Also a resolution that the constitution of the Wisconsin Territorial Medical Society "be so altered that the annual meeting be held on the fourth Tuesday after the first Monday in January."

These two resolutions constitute the only recorded testimony of the existence of a constitution and by-laws of the society at that time.

However, the meeting the next year was not on the day stipulated but was held on February 27, 1848, the memorandum being that the meeting on the regular day lacked a quorum.

At the next meeting five delegates were elected to attend the next meeting of the American Medical Association at Baltimore, none of whom attended. Also at this meeting resolutions were adopted responding to the call of the New York College of Pharmacy, touching the adulteration of drugs and the importance of memorializing Congress on the subject.

The Territory of Wisconsin having previous to this meeting become changed to the State of Wisconsin, the name of the organization was changed to the Medical Society of the State of Wisconsin. Dr. Dousman was elected president; Dr. Chapman, recording secretary.

It is recorded that at the meeting of 1849 three delegates were designated to attend the meeting of the American Medical Association at Boston, but none attended. It is recorded that at a subsequent meeting at Janesville in 1849 five delegates from the county and district societies attended, the first that had ever come from the local societies, so far as the records show. There is implied in this something of the organization in the way of delegates from local societies.

At this meeting a recommendation from the American Medical Association as to the code of ethics and the standards of preliminary education for medical status was laid on the table. A resolution in favor of registration also was laid on the table. It appears that previously Dr. Castleman had been appointed to confer with the chancellor of the University of Wisconsin on the subject of organizing a medical department in the university. At this meeting he reported adversely to such a move. This is the first record there is of what became a more or less perennial question.

How difficult it was to acquire information in a territory so new is evinced by the following:

A committee which had been appointed, consisting of one physician from each county as far as could be done, to report the names and residence of all practitioners of medicine and surgery in the State, with a view to determining their various merits, reports that no reliable information could be obtained.

For a period of years after 1850, the meetings appear to have been meagerly attended; frequently the chronicle being that there was not a quorum. In 1854 a constitution was adopted and the following were made permanent members: Brisance, Blood, Favill, Wright, Head, Ayers, Brown, Ladd, Van Dusen, Gray, Hoyt, and Pease. In this year also the code of ethics of the American Medical Association was adopted.

In 1856 a resolution was adopted appointing a committee to memorialize the legislature on the subject of building a State hospital for the insane.

At the breaking out of the war of the rebellion, the society practically died. Most of the members went into the service and no meetings were held. The record of the medical men of Wisconsin in the army was one preëminently honorable. It will not do in this paper to undertake any discussion on many interesting phases of that period.

In 1867 a meeting was called at Janesville for the purpose of reorganizing the society. In the call for the meeting there occurs this *résumé*:

The memorable year 1861, when Sumter was fired upon and grim visaged War surprised a peaceful nation devoted to the Arts and Sciences, and broke up so many honored associations, was not less severe upon our State Medical Society than upon others. 1861 was the last time it convened. Before the year rolled around many of its active members had their names enrolled in the Grand Army of the Republic, some of whom are now numbered among our fallen heroes. Our secretary, the brave, able, and indefatigable Pease, is among the number. During all these years of weary war, the public mind was so engrossed

with the national calamity, that it was not deemed practicable to attempt any meeting. With the nation at peace again, the surviving members of the Society one by one turned their thoughts to their honored Association.

In about 1871, Dr. Reeve of Appleton became secretary of the society. He makes this summary:

The history of the Wisconsin State Medical Society seems naturally to divide itself into three distinct periods, and the secretary in preparing a list of its members from its organization as directed has thought it best for the sake of clearness to divide the list into three several parts in accordance with the epochs of its history. For the list given below we are indebted to Dr. Van Dusen.

The Medical Society of the Territory of Wisconsin was organized in 1842 by the authority of the territorial legislature. It was modeled especially as to membership after the charter organizing the Medical Society of the State of New York, being composed of permanent members, only two of whom could be elected annually, and of delegates from county and local societies which were entitled to send to it in proportion of one-fifth of their membership. These delegates were entitled to all the privileges of permanent members during the time for which they were elected. The society was thus sustained until 1854. Its name in the meantime, Wisconsin having become a State, had been changed to the Medical Society of the State of Wisconsin, when by act of legislature the resolution regarding the members who could be elected to permanent membership was removed. Up to that time no record of members is to be found and all records prior to 1847 are lost.

From 1870 on, the progress of medical affairs was uniform and thrifty. There has been no time from then until now when the State organization has not been well managed and influential.

Departing now from these footprints of organization life to something of a bird's-eye view of the whole situation, I am disposed to indulge my fancy somewhat. As I picture

those old days they seem to me, as I have before stated, a time of great moral quality and mental strength. I think this would be the predominating characteristic of that period.

The period beginning with 1880 must be regarded in medical matters as the renaissance. The demonstration of the germ theory of disease and the enormous advance and readjustment incident thereto, as a history in itself, is to many of us very familiar, but before this happened there began to spring up in Wisconsin a faint light, developing later into a brilliant flame, which I believe to have had a more signal influence upon the scientific advancement of the medical profession in Wisconsin than anything that ever happened. When I was a young boy, perhaps fourteen or fifteen years of age, I remember distinctly hearing my father discuss with his colleagues the remarkable ability shown by a young physician who had read a paper at the State Medical Meeting. The name of this young man, then practically unknown, was Nicholas Senn. From that day until long after he left Wisconsin he never failed to put the impress of his genius upon the medical profession of Wisconsin. His scientific spirit, his thirst for knowledge, his wonderful sagacity, his phenomenal endurance, his inspiring enthusiasm combined to make him the greatest teacher, of the greatest scientific influence, that the State has ever known. That the State has developed quantities of able men, teachers, practical men, and leaders since that time is, of course, true, but no one who is in position to have seen the unfolding of scientific medicine, as it gradually revealed Nicholas Senn and his school, could venture to differ with my estimate of his importance.

Two phases of medical development are worthy of mention at this point.

Wisconsin early acquired a strong conception as to public health matters, and in 1876 there was appointed the first State Board of Health. The members of the original

board were E. L. Griffin of Fond du Lac, who was chosen president; Jas. T. Reeve of Appleton, who was for many years secretary; and John Favill of Madison, Solon Marks of Milwaukee, James Bintliff of Janesville, who was not a physician, H. B. Strong of Beloit, and O. G. Seldon of Tomah. It is impossible to trace the steps of development of the State Board of Health, but it is fully worth while to call attention to the fact that no State board of health is stronger or more vital than the present board in Wisconsin. What is known as the "Wisconsin idea" in legislation and administration has extended in full to its State Board of Health, and a careful study of that situation will show an enlightenment and effectiveness that is fully abreast of the best of the advanced things of Wisconsin public affairs.

The other item is medical education in Wisconsin. The first flash of that which has been previously noted as cropping out from time to time in the suggestion for a medical department in the university, is described in the following words written by Dr. B. F. Dodson of Berlin, the uncle of John M. Dodson of our society. Speaking of the profession of medicine in the early days, he writes:

I went into Dr. C. B. Chapman's family, December 17, 1851, and remained until November, 1853. Living in the place besides Dr. Chapman were Drs. Favill, Ward, and Gray, all in active practice. At Cottage Grove were Drs. Rogers and Crane. Dr. Rowley, I think, lived at Middleton. In the Spring of '52 there was added Dr. Bowen, who came from Rochester, N. Y. At this time Dr. Chapman was giving a good deal of time to instructing students, having a couple of rooms for that purpose on the corner of State Street, in which the class had an opportunity to do some dissecting, some friendly physicians outside furnishing the dissecting material. During the summer months, his aim was to hold weekly recitations in anatomy and physiology. As most of the class was made up of persons otherwise engaged, they could not recite every day. I may mention the names of some of the class, though I can not give the given names: Wilcox, afterwards member of the assembly; G. R. Taylor, who afterward

practiced at Waupaca; Prof. Enos, principal of the Madison School; Holt, who afterward practiced at Little Falls, N. Y.; Boswell and Crandall, two university students who returned to Canada in '53, and others—as well as myself.

Because of the meagerness of the clinical material available in the State, and particularly at Madison, it was never deemed advisable to start a full medical college during the last half of the last century. With the further evolution of university importance came the natural demand for a department of medicine, and in 1907 there was organized at the University of Wisconsin a department of medicine, which covered a course of two years, consisting of the first half of a modern medical course. From the very beginning this has been a department of the very highest excellence. Before this department was fully organized, the University had been giving what was known as a pre-medical course, which was universally acknowledged to be of the best quality as a preparatory work for the medical profession. It would be impossible to deal justly with all of the factors that entered into its latest development. Suffice it to say at this moment that there is not in the country to-day a better course covering the first two years offered than that at the University of Wisconsin. Starting out with the avowed purpose of confining the course to non-clinical studies, it has been unhampered in its scientific development. As medical men there is nothing in the history of the State to which we can point with greater pride and satisfaction than the present status of its medical instruction.

All in all, the progress of the profession from its pioneer days has been a consistent and logical and thoroughly strong development.

In sketching this last so extremely superficially as I have done, I am aware that I have been able to do nothing but suggest the characteristics of the State rather than enter into its history.

In looking into the matter, such a mass of material is

available that is of interest, and important from the medical standpoint, that I have come to see but one possibility for a paper of this character, namely, that it should be a running sketch more or less acquired by personal familiarity and reminiscence. In so doing I have had to pass by scores of men of strength and significance, whom I should delight to describe and characterize, because of their intrinsic worth. Any such effort, however, must be reserved for a more serious labor.

I have already encroached upon your time as fully as I ought and I shall be more than repaid if I have conveyed to you the feeling which I have, and which is shared by my colleagues of Wisconsin, of loyalty, admiration, and love for the old guard and enthusiasm and approval and possibly a little envy for the new.

Delivered, to the Graduating Class of St. Luke's Hospital Training School
for Nurses, June 20, 1912.

Printed, *The Alumna*, September, 1912.

TRIFLES AND IDEALS

WHEN I am invited, as I have been once before, by the nurses of the graduating class to address them upon this occasion, which I hope is auspicious and which I am very sure is significant, I find my gratification gradually merging into a sense of responsibility.

I am quite sure that no one intended that I should deliver a sermon or even deeply moralize in connection with these exercises. Nevertheless, I find myself becoming serious and thoughtful, as I think the matter over, and as I analyze it I see that beneath it lies a consciousness of relationship to these young women, which is very much deeper than casual and more responsible than merely friendly.

Perhaps it is natural to those who have attained considerable years to look over the field of human relations in a mood that is contemplative, and with a sense of importance as to one's view that would not be natural to those who are upon the threshold of a career.

I am about to take a text for the purpose of examining it to see whether or not it is sound. I do not know whom I quote in this stanza:

A young Apollo, golden-haired, stands eager on the
verge of strife,
Magnificently unprepared for the long littleness of life.

The first impression of that sentiment is unpleasant. For even though it be not interpreted as cynical, there yet runs through it a note of anxiety and perhaps disappointment.

Those who have not looked back upon the young with feelings of solicitude as to their course and development

and well-being, can hardly realize how the hearts of elders ache to shield those younger from much that the world has heaped upon themselves, and to guide them through the maze of blunders, of which life is largely made up, in such a way as to bring them greater happiness if possible or at least to lessen the enormous apparent waste that comes through life lived in such obscurity of view as to permit the mistakes which life so generously furnishes.

I am very sure that it is unsound to argue, as we often do, that everything must be learned by experience, and that that which we of mature experience have learned we can in no wise pass on. Clearly this is not true with regard to abstract knowledge. Why should it be true with reference to that intricate, intimate, and difficult field of living one's life?

My conclusion, therefore, is that our method of approaching knowledge of life differs from our method of approaching knowledge of other sorts, and that our conspicuous failure to pass on, for the benefit of our youngers, that which we have learned is probably more a matter of method, than a matter of essential possibility. To me the fact appears to be that knowledge of living, which means not only that which we have gained by experience, but that which we derive out of our philosophic life, is not set forth with the clearness necessary to its comprehension.

It is obvious that for this there is abundant reason. One can not unfold all the experiences of his life, expound all the theories of his philosophy, nor attack the inner consciousness of his hearers, without opening up the inner recesses of being to an extent the extreme of which would be unthinkable.

If one were to array everything that he might offer for the benefit of the younger generation as constituting the best contribution to humanity, he would probably succeed only in setting forth, no matter how truthfully, a bald array of facts more or less unpleasant, entirely one-sided

with respect to moral value, and probably conveying no accurate idea of the truth.

It is next to impossible in language to tell the whole truth; and to undertake to set forth isolated facts, particularly the facts of confessional, the facts of failure, or the facts of discredit, without at the same time giving all the atmosphere in which they should be interpreted, is to prepare a picture under the guise of truth which will be in its influence to a large extent falsehood.

It is not likely that our effort to pass on the fruits of our experience will be best promoted by the analysis of the detail of our respective experience. Yet, I return to the statement before made, that we make no effort to formulate our experience comparable to that which we expend in the formulation and transmission of abstract knowledge.

I am convinced that one of the factors in this educational failure is the fact that all childhood is a period of delusion. To some extent this is inherent in the nature of childhood. To some extent it is a creation of our way of dealing with childhood. The child is by nature imitative. He early becomes the imitator of his elders. His aspiration is in the direction of things which he conceives to be the things of developed life. As a baby he selects a vocation or chooses heroes or writes a novel or fights Indians, with as much intensity of purpose as he ever will manifest. This tendency one can neither criticize nor regret. It is the channel of human progress. One would not modify it nor divert it. Do we intelligently and adequately utilize it?

Beyond question we create consciously or unconsciously ideals for the young. It is with these ideals which the mature set before the young that I wish to deal. Literature, art, history as it is written, the pulpit, the press, and the teacher all tend to idealize human experience.

The abstractions of truth, beauty, virtue, friendship, ambition, riches, and power are dominating notes in the mental pabulum which is available for the young.

That the essence of any or all of these has its value, one need not question. The fear of destroying or defacing any image which we create and set up as an ideal, inhibits very strongly any tendency which we might otherwise have to discuss the facts of life freely. I submit, however, that any image which is not consistent with the facts which must be assembled for its support, which must be approached abashed with head down and feet unsandaled, is an idol, not an ideal. Worship of the world has always been directed toward abstractions. For the most part, worship of the world has been without comfort or solace or sense of unity. Fear, placation, and adoration have played their part, but sympathy and oneness rarely. To a very large extent the disappointment of life is due to this chasm which yawns between our abstractions, be they religious or ethical, and our actual living experience. We have created for ourselves, out of our imaginative nature, dreams of magnificence, and we have had created for us, by our elders, standards of thought, philosophy, and conduct to which our natures variously respond, but on the whole towards which we reach out with hope and confidence and exaggerated faith.

Hence the picture which I set forth at the beginning,

A young Apollo, golden-haired, stands eager on the
verge of strife.

If one were to abruptly stop the discussion at that point he would fairly portray our attitude as parents and teachers toward youth, and its chances in life. This is what we have said, that is what we have done, and even what we have permitted ourselves to think, as we have adjusted ourselves to our children, and yet there is not one of us but knows that there is a ring of untruth, about it: and for my part I believe that it is reaction to that untruth, fully as much as the realization of the facts, that permits so much unhappiness in the development of the average life.

Disappointment is rarely simply deprivation. Almost

always comes into it the element of deception. One has hardly set his heart upon a thing, strongly enough to suffer much disappointment, who has not been led to feel confident that it is a legitimate expectation. If it should prove in the end that his hypothesis is untrue, either he will discredit his teacher, repudiate his ideals, or embitter his life with self-reproach.

If the comment be made that this is a sad picture, I ask you in all fairness whether it is one bit sadder than every life at some point, and than many lives throughout? It is unwillingness to look at things as they are that makes us the playthings of every puff of wind, and it is only by looking at things as they are that we can hope to find a sound philosophy and a better method.

My general criticism of the way we live our lives is not a criticism of our ideals. I criticize our relation to our ideals. In a word, we are too far separated from them. We have been enjoined to "hitch our wagon to a star," when we ought to use it for a headlight. The only way in which we can get pleasure out of our path through life is through its illumination.

It is true we may walk in the dark, we may keep the path and we may not even stumble, but the joy of the way can never be there. Only to the fanatic can the shrine at the end of the way be life's sole benediction. It is the quality of the means and not the magnificence of the end that give character to any life. It follows, therefore, that our ideals should be distributed rather than concentrated; that we should clothe with its appropriate measure of ideal every experience in life. If that idea be developed, one sees unfolded before him a wonderful dream, and the thing that bears in upon him almost oppressively, until he learns to use it, is the consciousness that there is no such thing as a trifle. Not only is it necessary to realize that in human affairs there are no trifles, but it is also necessary to put upon small things their true value.

The tendency of the day is toward expansion, not only of opportunity, but as to standards of living. We are prone to complain of the indulgences which people permit themselves in material things and in social relations. The implication in the indictment is that luxury and self-indulgence is the deteriorating and damaging influence. There is no doubt from many points of view that this is true, but for our present purpose I wish to look upon the trend of the times with respect to another matter.

The whole tendency of the day, in people who have any possible margin of choice, is toward the elaborate and away from small things. Whether this be in personal adornment, sport, or social activities, the drift is unmistakable. To me, there is in this movement a great human loss. By as much as pleasure and satisfaction is dependent upon magnitude and complexity, by so much are the opportunities for satisfaction in life diminished. The application of this is much broader than the mere question of pleasure. It is as deeply related to what one gives as to what one receives. The day when the conventional gifts of the holidays became matters of expense and burden rather than tokens of kindly thought, sounded the death knell of the institution. The day when one's social offices departed from simple lines of hospitality and launched upon the sea of "entertainment," killed by ninety per cent the possibilities of wholesome human intercourse.

All these are temporary phases of our social development and are neither hopeless nor presumably very serious, because things do swing back, but they serve to illustrate and emphasize my point that to lose one's appreciation for small events, occupations, or offices of life, is to be deprived of the very great preponderance of its possibilities.

As regards one's internal life, the same general considerations apply. A friend of mine, a very able physician and profound philosopher, once said to me seriously, "Do you attach much importance to health?" My reply was, "From

the standpoint of an asset which one can use to advantage, or if necessary abuse with impunity, I think I do, but the great value that I attach to having health is the process by which one has it." Up to a certain point, and up to a certain age, health is reasonably automatic, and not perhaps a matter of much conscious or internal effort, but beyond that point health can only be maintained by conscious and intelligent management of one's life.

Under prevailing social conditions, the maintenance of maximum health is a matter of discipline. Not only does it involve intelligent decision as to conduct, but it involves thorough mastery of one's opposing impulses, and for the most part unceasing vigilance. The person who has adopted an ideal of health as a fixed ethical demand, has gone far. He who consistently will live to determine that result has become not only powerful but free. There is no freedom except that which comes through thorough self-possession, and the way to this in matters of health is never easy, yet most of the points which are crucial are matters which are generally regarded as too trifling for serious consideration.

The quest for health perhaps illustrates better than anything the importance of incorporating our ideal into daily life. In no department of human experience is it more true that in order ever to reach the end desired, every quality of the end must be present in our acts from the beginning. It is conceivable that a man can say that he will be dishonest until sixty and absolutely upright from then until seventy, or that he will be irreligious until old and religious at the end, but experience shows beyond any doubt that in order ever to have physical well-being toward the end of life, one must have adhered to sound principles from the beginning.

If this is true in these simple, commonplace, rather obvious phases of human experience, how much more is it true in the complicated relations of developed social existence? If one is to find in his single personal contact

such importance in small detail, how much more is it true when the possibilities of reaction are multiplied in terms of society?

Have you ever stopped to consider what things in your life experience have made the most lasting impression upon you? Do you realize they are the things which are not taught you nor told you with any intent to instruct, but things of the most casual accidental nature? If you reflect upon it, you will come to see that the small things which you do or say or encounter in life are perhaps the most crucial, and if out of that reflection you gain no precept or rule as to what you shall do, you at least will gain a recognition of the importance of not misrepresenting yourself by thoughtless or deliberately unfaithful conduct.

As one reflects upon it, one comes to appreciate the influence of casual relations upon all things which one touches. The more deeply one takes that to heart, the stronger is the feeling of obligation to determine and maintain an ethical standard throughout the infinitely complex relationships of life.

Given this point of view, no longer can life be regarded as made up of littleness. Every day, every hour, every turn, there is a significance and importance to conduct which dignifies it beyond expression.

Particularly is this true with reference to relationships which may be regarded as of unequal footing. The attitude of the rich toward the poor, the powerful toward the weak, the steady toward the vacillating, afford intensification of this point. From this point of view, those are particularly fortunate whose opportunity or vocation in life puts them in position to think or say or do the things of deeper value, with respect to their less fortunate fellows.

Has anyone much larger opportunity in this regard than the competent nurse? I have always regarded this vocation as of peculiar importance in the human fabric.

The nurse who has had adequate training and faithfully availed herself thereof, is, in the ranks of men, an expert.

In breadth of experience, technical skill, and cultivated judgment, she stands out from the rank and file of people as of peculiar value and unusual importance with regard to matters of the deepest human import. If one were not so accustomed to it, he would marvel at the absolute faith that is pinned upon a mere girl just because she is accredited such an expert.

The most important consideration which human happiness holds is entrusted to this girl without question and without analysis. Yet such analysis would show that this confidence is based upon a belief, first in her technical ability, and second in her conscience. Either being lacking, the whole structure tumbles; if she is not trained she can not be trustworthy; if she is not conscientious she won't be trustworthy, and yet without a thought we place the issue of life and death unhesitatingly upon her young but competent shoulders.

Is there not in this picture untold inspiration? Does it not deprive drudgery of its ache and routine of its irksomeness? Does it not, above all, make the idea of trifles an absurdity? Does it not serve to emphasize the proverb, that, "A chain is as strong as its weakest link"? Does it not make the weakest link a subject of deep and perhaps enthusiastic effort?

And yet, it is not with reference to the technical skill and scientific faithfulness of the nurse that my mind is most directed in this connection. I have much more in mind her opportunity in the development of her relationships. Who is there that is closer to the hearts of the suffering? Who is there more fitted to see clearly the threads which are running through the warp and woof of human experience, or has more opportunity to put them straight?

It is not true that the lives of all nurses are benedictions. It is true that every nurse has the opportunity to be a

ministering angel. I would not limit this to the mere question of soothing the troubled sufferer or waiting upon the querulous invalid. The opportunity is much larger than that; opportunity to influence, perhaps by word, more often by deed, and always by spirit, those who are through misfortune put upon a footing unstable, unhappy, and often untrue.

To come into a situation thus demoralized, strong, clear, and courageous, is to enter upon a relationship in life with the maximum opportunity to accomplish great things, but an opportunity which, to fully grasp, one must *be* great. No nurse can reach the fullness of her power and influence without conscious and intentional cultivation. What she can do with herself will determine what she can do in the world.

People are variously endowed, but very meager endowments developed under a lofty spirit will go far beyond the most brilliant talents smothered by indifference and self-esteem.

As we get on in years, life is prone to pass before us in review, and everyone sooner or later comes to a time when he measures up the past, weighs the experience of life, and in some more or less direct formulation decides whether life has been a big thing or a little thing. Is it not perfectly obvious that one's decision must be determined very largely by the sum total of one's activities? Whether it can be plain to you or not, I have no hesitation in making the assertion that the conclusion upon this question will turn almost solely upon the importance that one has attached to the small events and more or less trivial contact of everyday experience.

The consciousness of having performed, even though inadequately, at least with fidelity, the details of life, will be vital. To be sure, those who have not done it for the most part will not know it, but to those who have done it, life will reveal itself very differently than to those who have

not. Upon this very point will turn one's attitude of mind as to the valuation of life.

He who at the end shall look back seeing clearly the littlenesses in life and on the whole shall despise them and it, is one who has signally failed in measuring up even to this littleness.

He who looks back upon this picture with sympathy and appreciation and approval, has at least been big enough for his opportunities.

He who can possibly bring into focus and clear vision, those proportions and relationships, in advance, and steadfastly and contentedly walk to them and through them, earnest and faithful and courageous, is invulnerable. To such an one the picture of eager youth, facing the realities of life, will not seem pathetic or futile.

For all youth one can but ask that their instinct to do the thing next at hand faithfully, may be sufficiently strong to carry them safely to the point where they finally realize the magnitude of life's opportunities.

Delivered to the Graduating Class of the Francis W. Parker School,
June 21, 1912. (Edited by J. F.)

UNSELFISHNESS

ONE of the deepest impressions I ever remember receiving was from the first morning exercise that I attended at the old Normal School during the days of Colonel Parker. At that time I saw perhaps more clearly than I ever saw—and I was then not too old to learn—the enormous value of early practice in public speaking. The memory of the spirit of that morning exercise is most vivid. There I learned, if I had never learned before, that it was possible for anybody, the youngest child in the school and the most mature and conscious, to get upon his feet and say what he thought, without preparation, without trepidation, and without disturbance. And I really think that it has had great influence, even in my mature years, in my speaking. I think there is perhaps no class of people before whom I could come more willingly, or indeed be more anxious to come, without any particular preparation for what I have to say, to set forth the few thoughts that have come to me in connection with this occasion. There is only one objection to this sort of thing, and that is that one never quite knows when one is done, and that is why I have asked you to sit down, as you may grow very weary.

We are engaged in this community now, very deeply engaged, in fact involved, in what is going on in the National Convention. There goes on a struggle which it is quite possible history may refer to as a titanic struggle. To our current view it looks very much like the fight of the Kilkenny cats, with all those types of personal feeling—asperity, rancour, vindictiveness, and perhaps more malevolent feelings—that come into human affairs, in what should be a great serious gathering of our people. Underneath it all

there is a meaning, there is a reason which it behooves us to see, and not allow ourselves to be carried away into abstractions of doubt as to the methods and acts of the political parties involved in that performance. Underneath this thing is a great social consciousness. The struggle, if one could put it into a brief word, is between what perhaps are known as Progressives and what perhaps should be known as Non-Progressives, although that does not very clearly state the facts. Nevertheless you know what I mean. The Progressives have a theory underneath their activities which is distinctly a theory of democracy, a theory of class consciousness, based upon the general proposition that it is the business of the thinking people of the world to undertake to mitigate or improve the general living conditions of the world. Underneath their activity is the idea of the present inequality of life, the inequality of opportunity, of endowment, of the general material things of life. And these people have set about to see if they cannot do something in connection with our organic government to better this state of affairs, to bring out of the present unsatisfactory state something which is more in keeping with the true spiritual as well as material welfare of the people. That is what is beneath the activities of this progressive movement. On the other side—but I really hesitate to call them Non-Progressives, because that is a word which is only fit to use as a distinguishing word and is not at all distinctive—is a class of people who, admitting all the facts as stated, nevertheless are at variance with the Progressive Party as to what ought to be done, as to how to manage it. And so these two classes of people come into a great clash, which has allowed itself to be terribly smirched with all the failings and weaknesses that men and women are prone to, and we are very likely to lose sight of the fact that there is going on there just that kind of a moral struggle because it has become more or less lost in the superficial weaknesses of humanity. And it is this moral struggle about the conditions

in question which has led to any such moral uprising and moral reaction.

It is a little difficult to put into a few words, and yet I need to call your attention to the fact that the crying characteristic of civilization to-day is inequality. The thing that has put this great revulsion into our minds about the value of civilization, about what it has accomplished, about what it can accomplish, is the fact that there is such inequality in the general distribution of the things that are worth while—that some people are starving physically, mentally, and morally, while others have a surfeit. And this thing has gone on from time immemorial, and is going on now, and perhaps getting worse rather than better, in certain respects, and the question is, How has it come about? Well, now, it has come about naturally enough; it has come about by reason of what is known as special privilege; it has come about by one class of people being stronger than another, by one class of people being more intelligent or more aggressive—or more something—which has led them into a position where they could get from the great masses of people special privilege. Under special privilege has grown up this state which has resulted in inequality, so that millions and millions of the world are toiling unduly and unfairly for a few thousands who prosper in material things unduly. That sort of thing has gotten to be very fully established as a recognized fact—so completely that everybody on both sides of this question would have to acknowledge it to be true.

Now what is the basis of this situation of inequality? The basis, we will say, for the sake of getting nearer to our own discussion, is selfishness; and now let us clearly see a distinction which everybody ought to learn to draw in this question. Does this mean a personal individual selfishness? Does it mean that such rich men, such rich women, all rich families, are selfish and are hanging on to whatever advantage in life they may have—unwilling to part with it

to other people? Now, you know perfectly well that it is not so; that there is not a potentate in the world, of great political power, or great money power—the Czar of Russia, Pierpont Morgan, or anybody you may choose—who, if he could settle this whole question by divesting himself of everything he had, would hesitate for a second to do it. You know that anybody who could solve this problem by his personal act would do it gladly. So it is not right to regard this thing as essentially individual selfishness. On the other hand, it is true, I think, that when individuals group themselves upon one side or another of these questions, and get into larger and larger groups, up to the point where we have great classes—as between the masses of people and the people who have great financial interests—they do tend to get together into aggregations or classes, and at that point there is not the slightest question that we do find the most alarming class selfishness. It is out of this situation that have grown our great governmental, political, and economic conditions, which amount to such terrible bondage in many ways, so that at this point nobody quite sees the way out. Nevertheless, I think there is undoubtedly a way out, and the question is how to get into operation the forces which are going to gradually evolve the way out of it. And so we come to this great progressive movement—which is not only in the United States, but in England, Germany, and every civilized country—a movement civilized and advanced. It is true that there is a great party in the world which is moving toward the abolition of special privilege and toward the creation of greater equality, without exactly knowing what it means by greater equality. If some party of progressives could at this moment wipe out all distinctions and start anew, that would not answer the question because of the great time necessary to change certain tendencies in human nature. The same situation would again come about, that is, if the whole thing went on from a perfectly new start under the old human

impulses. So nobody quite sees the way out. Nevertheless, it is pretty clear that the awakening of a class consciousness which shall offset class selfishness is not only the most immediate step to take, but probably the most necessary step. It is even more clear that we have got to get into mass movements, into a corrective forward movement, before these things can be very much straightened out.

Well, even so, I maintain that that is not going to stop it, and it is all upon that point that these great political parties split. Do you suppose there is any question of the great conservative party, so-called, being just as honest, just as earnest, just as much lovers of humanity as the Progressives? We all know as we stop to look at these things, at our neighbors and our friends, we know that people on one side of that contest are just as good and honest and earnest as on the other. There is no doubt that there is a political prejudice to a certain extent back of it. I say that to you because it is desirable to get the illusions out of our minds on this question of a political split and division.

But suppose we reach a class consciousness and project a great progressive movement in the world looking toward betterment of things. Is it going to finally and fundamentally solve the difficulties? It is going to help. We are going to establish standards which we shall not change; one thing is going to be established as right, and another thing is going to be established as wrong, and we are never going back from that. All these things look toward progress.

Yet, all these are man-made standards, and have no deep and fundamental relation to the evolution of human affairs. After the class consciousness has been established, after the progressive movement has gone abroad among the people and they are moving unanimously towards something better, we come back to the question, is that enough? Is it enough that the mass of people shall have moved toward a pretty good thing? Manifestly that is not going to solve the whole

difficulty, by any means. It is only the first step in the process. The question then arises, which should have come first, if great political parties cannot reach the solution by giving up their special privilege and helping the mass of people along, why, what is there that can attain the result?

Let me call your attention to the fact that all masses of people are made up of individuals, and in the last analysis the quality of things in any given civilization is related, not to the mass, average quality, but to the individual; and it brings us right down to the question of individual standards, individual measure, individual quality, on this very basis of selfishness and unselfishness.

I think I should have great difficulty if I undertook to define to you what is selfishness and what is unselfishness.

What is selfishness? Let us think about it for a minute. Going on blindly, seeking our own, doing the best for ourselves, ignoring everybody else, perhaps would be regarded as selfishness. Deliberately seeking to do the best for others, always ignoring ourselves, would be unselfishness. So, it is only for practical purposes that we have got to consider selfishness and unselfishness as being opposites, which is not strictly true. But to-day we will talk as though that were so.

We find many people defending themselves in conduct that we charge them with pursuing upon the basis of selfishness—we find them defending themselves upon the basis of fundamental unselfishness. They say, "It is best that we do so-and-so; it accrues to our advantage, but on the whole it is for the good of all." That may be true, or it may not. The burden of proof is heavy on the individual.

When we come to unselfishness, we also find it very hard to be certain. We do a given thing, we make a given effort to do something for somebody else. Stop and think of all the ramifications of that! Does it come back to ourselves, to our advantage or not? In a large proportion of cases our unselfish act comes back to our advantage, and really takes

the unselfishness out, because self-interest is really more promoted by an apparently unselfish act than we would be willing to admit. How are we going to adjust our minds to that situation? How are we going to find out what is the really unselfish act and what is not, considering the complex relationship that we occupy to others and considering that everything that we do reacts upon ourselves, so that the thing in the unselfish act may be the most advantageous thing? It is a very difficult question, and it is a question that I present to you merely to think about. It is a question that comes back to everyone of us to settle for ourselves. I hope that these things will become more automatic with us so that we will not have to stop and consider; I hope we may come to the time when we may follow our instinct without asking questions. Nevertheless, it is well for us to ask ourselves what our motives are — what our real attitude is on this question of selfishness and unselfishness. It will not do to simply find that we are giving of ourselves lavishly; it will not do to consider that we are giving of our material resources. That does not prove anything. Suppose I have something on my mind that I want to do. I want to do it terribly. I want to give a large sum of money — I want to do it. Why? It is quite conceivable that I want to do it to satisfy something inside me — for personal gratification. Unless it comes to the point where we do not care for our own gratification and are not willing to consider any of the effects upon ourselves, we really are not deserving of the quality which we are trying to describe in this discussion of unselfishness. And so, when you come to analyze almost any of your acts, almost any of the things that you do in life, you will find them very complex, and you can not be sure, without stopping to think about it, whether this thing you want to do for somebody else is selfish or unselfish. But there must be a dividing line in there somewhere; a dividing line must be the essence of this situation.

Let us come to the simplest problem. Supposing that Robinson Crusoe is before us, so that we have to consider his case. He is alone. The presumption is that he will do the best thing for himself. If there is any food here, he will eat it; if there is any raiment, he will use it; if there is any other actual advantage, he will take it. No one will question his right to anything for his advantage under the circumstances. Suddenly there comes into the situation another individual. The same food is here, the same raiment, the same advantage or disadvantage. Do the same principles of ethics apply to him now as applied to him before the second individual came? If he is an animal, yes. If he is a savage, yes. If he is in any of the classes of people that have not come under our rules of ethical development, yes. But this is not true under *our* ethical conception. The fact is, the minute another individual came into that situation, it changed. If there is only a limited amount of food, and of raiment, by right they belong equally to the second. Why is there this ethical distinction which comes along the minute one man's circle begins to impinge upon another man's circle? I can not answer that, except that one knows inside of himself that, in that simple situation, unless you are going to open the question of strength, the rights of the second are equal to those of the first. So, you will see that the question of what Robinson Crusoe had to do about it was very largely a question of his frame of mind. In other words, the question of selfishness was a question of his attitude, and the question of unselfishness was a question of his attitude.

This is the word that I want to say to you in conclusion — that it is not at all primarily a matter of what you do; it is not primarily a matter of what you say; it is primarily a matter of your attitude of mind toward your neighbor. If your attitude of mind toward your neighbor is such that you are willing that your neighbor should have, without any question, everything that belongs to him from every point

of view, the foundations of unselfishness exist in you. If you are not willing that your neighbor should have everything that belongs to him, the foundations of selfishness are in you.

But it brings us at once to a very practical question that we have to meet every day—How am I going to tell what belongs to my neighbor in the ordinary relations of life? Here in the school, with my classmates, running along as we do, side by side, getting this and that from our education, how am I going to know what belongs to my neighbor and what does not belong to my neighbor? Right there is the difficult question. If you undertake to sit down and decide for yourself what your neighbor has a right to from you, you will be full of difficulties, and you are quite likely to sit there deciding until the time to do anything about it has gone by. It is an attitude of mind, and for practical purposes and under the development of present day methods of thought, we have got to make a wide margin in favor of our neighbor. You cannot draw a dividing line and say, "On this side are my rights, and on that side are my neighbor's rights." We have got to state, "Only these are my rights; all the rest of them are my neighbor's."

This is the only real solution. Of course the result is—assuming that our neighbor takes the same position—that encroachment can never occur. The only legitimate place where you can stand, yourself, in undertaking to deal with this question of selfishness, is on this platform—"I have a right to my life, and all the rest is my neighbor's if he needs it." That is an attitude that seems extreme. It sounds as if one were trying to make of himself a groveling worm. It is nothing of the sort. The essential of the situation is faith; faith in yourself, faith in your neighbor, faith in humanity. And the essential of that is faith in civilization, in goodness, in the stability of things. There is nothing so desirable to cultivate as a trust in every kind of life relationship. Actually, this is not a difficult question. Practically, action always brings its legitimate reaction, and as

a matter of fact, when you have gotten to the point where you can say without reservation, "I do not want anything of my neighbor's; I want my neighbor to have everything that belongs to him," the tables are suddenly turned and it is difficult to stop things from crowding in upon you.

This whole question of unselfishness does not need to be complicated, difficult—the deciding between one course of action or another. The only thing that you have got to decide really is:—"How down inside of myself do I feel toward others?" And, if down inside of yourself you can feel toward others in keeping with this proposition, the details will take care of themselves. You will then have no question to decide.

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HAVE AN OUTSIDE INTEREST

I DO not feel an entire stranger in this organization — although it is the first time I have had the privilege of appearing before you—as I have some relation to the Company in an advisory medical capacity. My knowledge of this organization, acquired in various ways, has convinced me that from the standpoint of medical service, from the standpoint of solicitude for the genuine welfare of the personnel of its organization, this Company is unique. I know whereof I speak, not only as to this Company, but as to others.

The questions that I want to bring to you to-night are serious ones, not relating to the Company's internal affairs, but relating to ourselves—to you and me alike, as we stand in the community; questions that come to us, perhaps, more seriously this year than in any year of our lives, or of anybody's life. In the course of my profession I have often had occasion to counsel with men of various ages, men along in years but not old so far as the conduct of their business is concerned. They have asked me as to their physical capacity to go on with their business, and the commonest thing is to have a man say to me under those circumstances: "Doctor, if I give up my business what am I going to do? I can't get along without my business. I can't stand it to be out of business." The answer would always be, if the circumstances would permit it: "Do not give up your business. It is better, even in a measure, to sacrifice yourself, than to give it up."

But why should such circumstances exist? With men along in years, not only captains of industry, but those in the rank and file of life, men in every walk and vocation,

men in every position of headship or employment in a business—with such men why should the question arise: “What am I going to do when I am not forced by daily requirement to go on in a strenuous way with my business?” In an economic sense, it should be open to every man, at a certain point in his life, to determine whether to continue his business or not. As a matter of fact, however, their particular circumstances prevent some men from having that choice. The simple question underneath the dilemma in which men are placed in facing such an inquiry is this: What other resources have they, in the conduct of their life, that will bring them any considerable degree of contentment or happiness? The unfortunate thing in all walks of life is that men under those circumstances are without resources, they are without any habitual training of thought or experience that leads them, by a natural process, into any outside field of interest which will employ the later years of their lives, and so save them, toward the end of their active careers, from a condition of comparative uselessness, discontent, and almost unhappiness.

Do not think, gentlemen, that I am overdrawing this picture; I am really stating to you a very human situation which, naturally, has not occurred to you very often. Most of you are young men—in the full prime of strength and ambition and energy. But there will come a time in the lives of every one of you (and it is not such a very far cry from thirty, thirty-five, forty, on to fifty, fifty-five, and sixty) when you must seriously consider what you are to do for the remainder of your lives. I ask you now to consider, in the simple terms of common sense, whether you ought to go to the end of your tether—to the time when you are no longer in business—without having life so much within your grasp that you can step from one sphere of activities to another without feeling that you are taking that step almost in desperation. Is it not unwise for us to live the earlier part of our lives, during the formative

period, in such a way that our latter days are crystallized into something little short of a prison house? The time to answer such a question is now — not years hence, when it is forced upon us.

In my judgment, every phase of your present activities, of your duties to the Company, will be enhanced or augmented by a judicious intermixture of other interests than your business. In youth it is easy to find pursuits more or less light and pleasurable in character. As you get older things begin to pall upon you. It will not be as clear to you what the next decade will bring forth to relieve that monotony of life that business makes, and free you from the apprehension that comes to every man, concerning what old age will bring to him. The things that you can rely upon to meet this situation in youth you can not count upon in old age. Therefore it is manifest that you should now take thought on this subject at every point of your work, and thus increase your value to the Company that employs you. I say this after much reflection.

What do I mean by outside interests? Bear in mind that interests are born of familiarity with subjects, that interests are the outgrowth of intimate knowledge of things. It does n't make so much difference what things. Let us take our popular national craze of baseball. What is a baseball "fan?" A man who simply goes to a good many baseball games and enjoys them and goes away and forgets them? Not at all. It is the man that knows the "dope." And he knows it through and through, and the more he knows it the more of a "fan" he is.

So it is with every phase of our lives. The thing which becomes an interest to us is the thing into which we put our intelligence. The fact is, gentlemen, that circumstances never have any intrinsic, pleasurable quality in themselves. The pleasure of life and the pleasure of circumstances is derived from what we put into them, not from what we take out of them. There is no question about it. So I am

urging upon you as a general proposition to have interests, really definite, consistent interests, that you may reasonably and honestly call intellectual interests, in some subject or other outside your business.

The other day, in talking with a friend about various public activities in which we had been engaged together, he said, with some feeling of discouragement: "There is nothing difficult about this matter if you can get the ear of honest men." He was referring to municipal affairs, to a number of situations that are important. To that I would like especially to call your attention.

The obligation that rests upon all men who are in dignified employment, men of respectable connections, of elevated business ethics, is to take part in their community life. Do you do it? Some of you, I know, do it tremendously. Many of you would if you just knew how. I venture to say, however, that in the minds of this splendid body of men here to-night there is not the conviction regarding this ethical relation to community affairs that there should be. Think that over. Let me say with all the emphasis I can that every unit of good that you can confer on the community by participating in its affairs will be returned to you in personal reward tenfold through the interest that will come to you from an intelligent understanding of the needs of your community.

We live in a wonderful country, under a wonderful government, complex, ramified, intangible, and rather loosely knit. None of us knows definitely much about affairs outside his business—particularly the social and political affairs around him. In the light of the turmoil which now exists in the world; with the internal trepidation every one of us feels as to what is coming next; with the serious thought that a large percentage of the men here to-night may never meet again if things should go from bad to worse during the next two or three years—with this in mind I ask you, gentlemen, to earnestly answer to yourselves the

question: "What are you doing toward the stabilizing of your government—not your National government only but your State and Municipal government?" Your answer may be: "What can I do? What influence have I in municipal affairs?" Let me assure you that the one force which is of the greatest consequence in the United States, the one force that can be mobilized to great advantage, is public opinion, is independent thought, is an intelligent understanding of the issues, be they national or municipal. Therefore, in the name of all the organizations that are reaching out for an honest public opinion, I urge you to realize that everyone who interests himself intelligently about his municipal affairs, thereby determining what his ballot shall be, is rendering yeoman service on behalf of his country.

Bear in mind, gentlemen, that there are a thousand ways in which you can bring yourselves into this relationship. There are the ways of philanthropy, the ways of civics, the ways of politics, the ways of all kinds of activities. It is not the specific group that you join; the point is to join some group which has for its purpose an intelligent understanding of the problems before us as a people and a determination to do its best, whatever it may be, toward the solution of those problems. Never in the history of this country has it been so imperative that every honest, able-bodied, red-blooded, clear-thinking man should have his mind set on what is the right thing for him, for his community and his country to do. This matter does not necessarily turn upon your expression of opinion. It turns finally upon the clarity of your thought. You can't have a clear thought without an outstretching into the matter that will give you a certain kind of exact knowledge. You can't have an exact knowledge unless you study—unless you think. You can not very well study this subject unless somewhere or other you get into such a group as I have mentioned.

I began by speaking about your individual happiness

because I know that anything you can do along this line will redound to your individual happiness; but aside from that, and beyond it, I say to each one here to-night, with all the earnestness that I can bring to bear, and quietly and seriously: Your country needs you, needs you more than it ever needed you in its history.

*Thou art not alone, and thou doest not belong to thyself.
Thou art one of My voices, thou art one of My arms.
Speak and strike for Me. But if the arm be broken, or the
voice be weary, then still I hold My ground: I fight with
other voices, other arms than thine. Though thou art con-
quered, yet art thou of the army which is never vanquished.
Remember that and thou wilt fight even unto Death.*

ROMAINE ROLLAND, "Jean Christophe," Part IX.

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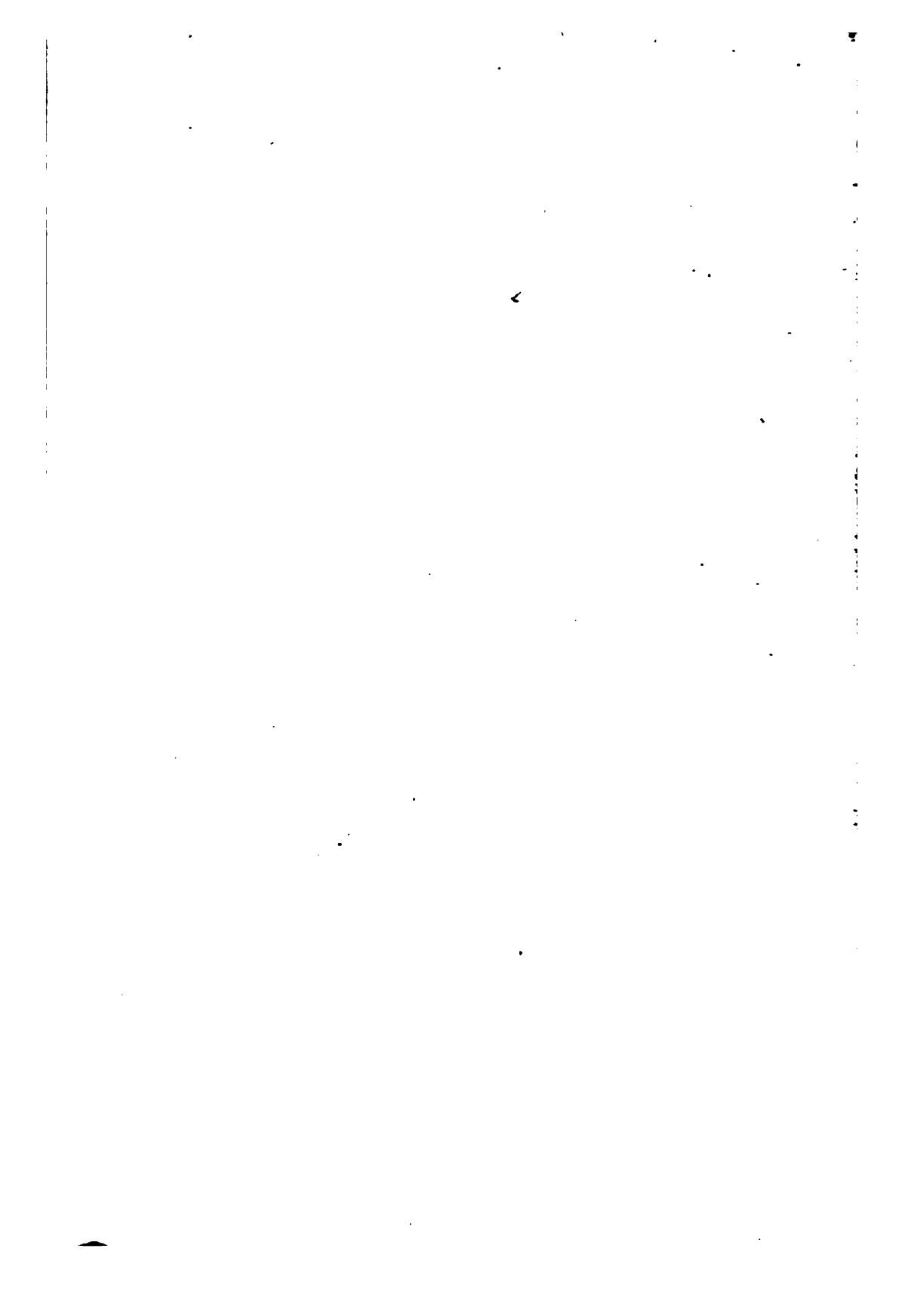
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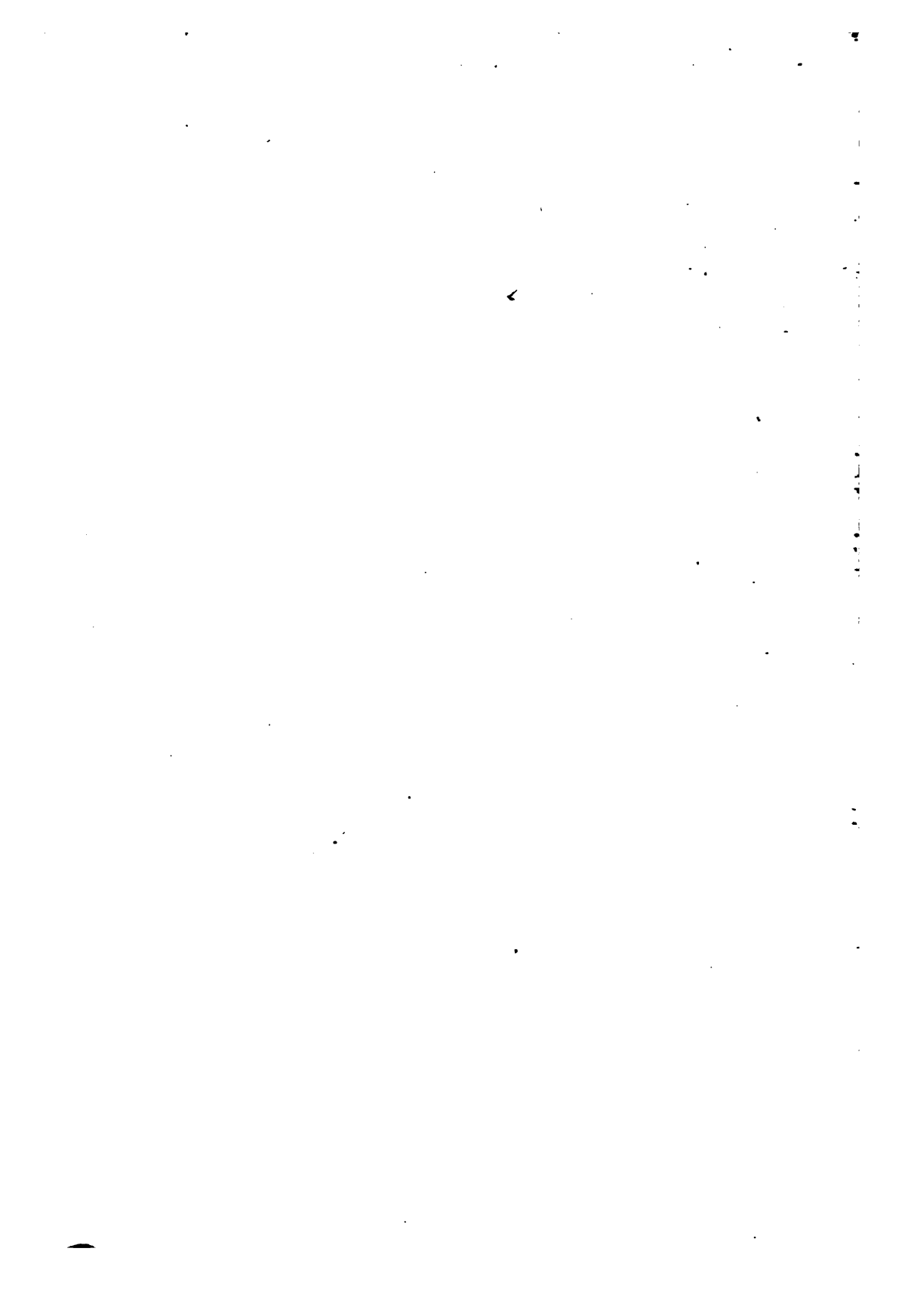
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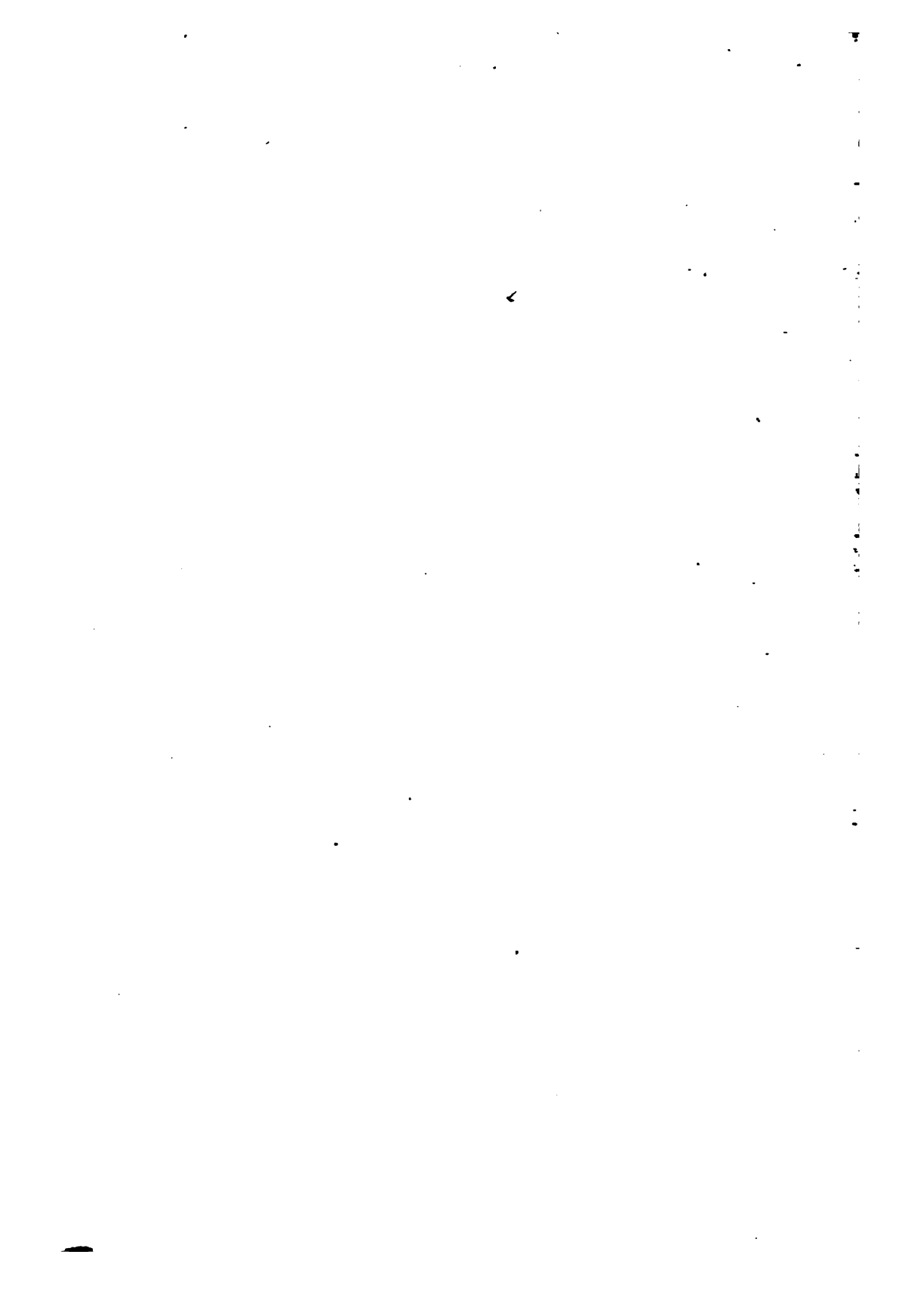
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